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The Cancer Centre That Never Was – The Organisation of Danish Cancer Research 1949-1992

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**Copenhagen
Business School**
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Marie Louise Conradsen

PhD School in Organisation and
Management Studies

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Summery

The Cancer Centre That Never Was - The organisation of Danish cancer research 1949-1992

This thesis analyses the demise of a remarkably resilient idea relating to the establishment of a public-private comprehensive cancer centre in Denmark. Plans to establish the cancer centre were made for more than four decades without ever amounting to an actual centre establishment. After 43 years, the cancer research community finally deemed the idea fruitless and no further plans were made.

But why did it take so long to abandon an idea that had at no point in its existence proved its worth or rationale? And why were better alternatives not explored although they presented themselves along the way?

This thesis employs a theoretical framework inspired by economist Douglass C. North and sociologist Pierre Bourdieu to answer these questions and determine whether or not the history of the cancer centre that never was can be seen as a case of path dependence. In doing so, the thesis focuses on three main questions:

- 1) Why was the goal of building a public-private comprehensive cancer centre never reached?
- 2) Why did 43 years pass before the idea of the centre was abandoned?
- 3) And is it possible to answer these questions by merely seeing the matter as a succession of historical events, or should it be seen in the perspective of path dependence?

By using North's concepts of formal and informal institutions, the thesis shows that the failure to establish a centre is closely linked to unfavourable institutional matrices at different times in history.

The thesis also shows how the idea of the centre was promoted for different reasons by various groups of actors in the case-story, and that the idea was most vigorously promoted in times of economic recession as a tool to secure either better funding for individual cancer research groups or for the anti-cancer cause in general. At every point in history, at least one group of involved actors did not have their needs met by the institutional matrix and used the idea of a cancer centre as a way of expanding the matrix to their own advantage – thereby prolonging the lifespan of the idea.

The history of the Cancer Centre That Never Was may, on the surface, seem irrational because it never paid off in the form of an actual cancer centre. However, by employing the concepts of North (institutions, path dependence) and Bourdieu's theory on social fields and actor behavior it seems that the path paid off in different ways and on different levels than through the establishment of an actual centre.

The involved public and private actors in the cancer research community had other reasons for

supporting a cancer centre than what was formally presented as the primary objective: the scientific coordination of cancer research in Copenhagen. Reasons that reflected a power struggle between individual researchers, public and private research organisations and the Danish Government on issues relating to the financing Danish cancer research.

The thesis concludes that path dependence did most likely occur in the story of the Cancer Centre That Never Was.

Table of content:

Chapter 1: Introduction	4
1.1 Setting the scene: Case study, problem and hypothesis	4
1.2 Institutions, path dependence and the organisation of Danish cancer research.....	6
1.2.1 Institutions and path dependence: Douglass C. North.....	6
1.2.2 Path dependence and historical writing	10
1.2.3 North, Bourdieu and their takes on the “rules of the game”	19
1.2.4 Choice of theory.....	29
1.3 The semantics of the thesis: talking about “cancer research”.....	33
1.4 What has already been done, and what is to be done: related literature on theory and topic ..	36
1.5 The case study in short: structure and central actors	43
1.6 Sources.....	48
1.7 The structure of the thesis.....	53
1.8 Language.....	54
Chapter 2 The early efforts.....	55
2.1 Organising the anti-cancer cause: The international scene.....	55
2.2 Organising the anti-cancer cause: the Danish framework	62
2.2.1 The emergence of a Danish health care system	63
2.2.2 The Danish anti-cancer cause	68
2.3 The support of experimental cancer research	77
2.4 The idea of the cancer centre	81
2.5 A clash of the titans?.....	89
2.6 Scaling down the vision - The Fibiger Laboratory	92
2.7 The molecular bandwagon of cancer research.....	99
2.8 Perspectivating summary	101
Chapter 3 The Kjeldgaard Report.....	109
3.1 Inspiration from across the pond: the American National Cancer Program of 1971	113
3.2 Scientific logic shoots for institutional change in the cancer field	117
3.3 Findings and conclusions.....	119
3.4 Financing Danish cancer research	124
3.5 The recommendations.....	126
3.6 The concept of “comprehensiveness”: inspiration from the US.....	133
3.7 Reactions to the Kjeldgaard Report	143
3.8 The Danish Cancer Society and the Kjeldgaard Report	147
3.9 Modernising charity	154
3.10 A centre takes form.....	158
3.11 Perspectivating summary	164
Chapter 4: The Rockefeller Centre.....	177
4.1 The two models.....	184
4.2 Playing into the matrix.....	189
4.3 A cancer centre = Form + X + politics?	195
4.4 The growth of the Danish Cancer Society	198
4.5 Path perpetuation in the face of destruction.....	202
4.6 Collapse!	209
4.7 Summary	215
Chapter 5 The Finsen Centre	236
5.1 Chimeras, cultural clashes and cracks in the centre’s foundation	240

The Cancer Centre That Never Was

5.2 The negotiation table revisited.....	245
5.3 Using the press as a battleground	252
5.4 Roles and morals.....	264
5.5 A second round of negotiations	268
5.6 The drawbacks of corporate charity.....	278
5.7 So close, so far	283
5.8 A disinterested approach: centering science	293
5.9 The debate meeting.....	297
5.10: Perspectivating summary.....	305
Chapter 6 The aftermath	325
6.1 The Copenhagen Comprehensive Cancer Centre	328
6.2 From Teilum to BRIC.....	331
6.3 The Danish Cancer Society's Research Centre	335
6.4 Summary	342
Chapter 7 Conclusions and perspectives	347
Sources and literature	375
Appendices A-F	

Chapter 1: Introduction

I followed an ostensibly lame turkey over a considerable part of the United States one morning, because I believed in her and could not think she would deceive a mere boy, and one who was trusting her and considering her honest. I had the single-barrelled shotgun, but my idea was to catch her alive. I often got within rushing distance of her, and then made my rush; but always, just as I made my final plunge and put my hand down where her back had been, it wasn't there; it was only two or three inches from there and I brushed the tail-feathers as I landed on my stomach – a very close call, but still not quite close enough; that is, not close enough for success, but just close enough to convince me that I could do it next time.¹

(Mark Twain: “*Hunting the Deceitful Turkey*”)

1.1 Setting the scene: Case study, problem and hypothesis

In 1949, the Danish Minister of Education inaugurated Denmark’s first ever cancer research centre *The Fibiger Laboratory* in Copenhagen². The laboratory was not only the first cancer research facility of its kind in Denmark; it was also the result of an unprecedented collaboration between the Danish State and a private interest group (in this case the Danish Cancer Society) on establishing and operating *any* type of research unit with the strategic purpose of solving societal challenges at hand³. The Fibiger Laboratory addressed the challenge of the cancer scourge, and the State’s involvement in the lab signalled a new state approach to problemsolving – namely research. The laboratory was initially supposed to come to include clinical activities as well as research in order to bridge the gap between bench and bedside as seen in the comprehensive cancer centres in the US. This would effectively have made cancer research the first research field to be institutionally and financially supported by the Danish State who did not at the time have a history of funding basic research or even research-based approaches to disease management. Instead, cancer research ended up being one of the last research fields to

¹ Twain, M. (1957). "Hunting The Deceitful Turkey". *The Complete Short Stories of Mark Twain*. C. Neider. New York, Doubleday & Company, Inc..

² Kieler, J. (1989). *The Fibiger Institute 1949-1989*. Copenhagen, The Danish Cancer Society, p. 5.

³ Rud, E. (1953). *Landsforeningen til Kræftens Bekæmpelse 1928-1953*. København, Egmont H. Petersen Kgl. Hof-bogtrykkeri, p. 101.

The Cancer Centre That Never Was

enjoy such thorough state prioritising as shifting policies, economic conditions and coincidental circumstances prevented the plans of a public-private comprehensive cancer centre to be realised. However the idea of such a centre was kept alive by changing groups of public and private stakeholders for more than four decades of on and off planning, even though real progress were never made, alternatives presented themselves along the way and though the scientific and societal value of the centre itself was even questioned by statistic evidence.

Despite numerous failed attempts to establish a centre in Denmark and despite the lack of rational basis for continuously promoting it, the idea of the centre was not abandoned for a period of 43 years and alternatives were never fully explored. This fact raises two crucial questions:

1. Why was the goal of building a public-private comprehensive cancer centre never reached?
2. Why did 43 years pass before the idea of the centre was abandoned?

This thesis describes and analyses a case of “non-institutionalisation” – the history of *the cancer centre that never was*. In following the demise of the idea of a centre, rather than the success of one, the thesis distinguishes itself from historical and socio-historical works on the actual creation of cancer centres⁴. However, the fact that no other organisational concept or tool was really explored as an alternative to the comprehensive cancer centre also opens a new vista for this thesis compared with other works on cancer organisations: Is it fruitful to answer the two

⁴ Examples of historical accounts of cancer centres that were established are:

On the interwar establishment of a network of cancer treatment centres in France as part of the French Government's effort to protect the public against what the country's anti-cancer associations had portrayed as the “scourge of cancer”, see: Pinell, P. (2002). *The Fight against Cancer: France 1890-1940*. London, Routledge, Pinell, P. (1991). “Cancer Policy and the Health System in France: “Big Medicine” Challenges the Conception and Organization of Medical Practice.” *Social History of Science* 4(1): 75-101.

On the establishment of the American National Cancer Institute (the NCI), see: Erdey (1995). *Armor of Patience: The National Cancer Institute and The Development of Medical Research Policy In the United States*, Case Western University. Here Erdey describes how the NCI was established in 1937 as the result of the federal government's and President Roosevelt's Public Law 75-244 which also committed federal government resources to the conquest of cancer through the NCI's grant-in-aid program which became a historical turning point marking the entry and expansion of the government into the field of medical research on a chronic disease.

On the creation of a centralised Canadian cancer program and its institutional settings, see: Hayter, C. R. (1997). “Medicalizing Malignancy: The Uneasy Origins of Ontario's Cancer Program, 1929-1934.” *Canadian Bulletin of Medical History* 14: 195-213. Hayter describes how the Canadian Government's effort to centralise cancer treatment in Ontario (1929-1934) was affected by how different fractions of the medical community perceived the plans in relation to their own professional domains.

On the establishment of the British cancer research institution The Imperial Cancer Research Fund, see: Austoker, J. (1988). *A History of the Imperial Cancer Research Fund 1902-1986*. Oxford, Oxford University Press. Austoker describes the establishment in 1902 of the UK's first and private cancer research institution, its research program, and its relationship and conflicts with fractions of the British medical community.

main questions by merely seeing the history of the cancer centre that never was as a succession of historical events; or should it be seen in the perspective of *path dependence*?

1.2 Institutions, path dependence and the organisation of Danish cancer research

1.2.1 Institutions and path dependence: Douglass C. North

The concept of path dependence is originally known from a body of economic literature dealing with the evolution of technology. The idea that small historical events can cause one technology to persist rather than more efficient alternatives was introduced by such writers as W. Brian Arthur and Paul David⁵. David specifically describes why the “QWERTY” keyboard arrangement has become universal. The QWERTY system refers to the way the alphabet is arranged on key in typewriters today. The system was originally developed in the late 19th century by an American inventor. It was to be used in a mechanical typewriter as an alternative to a more straightforward alphabetic arrangement, as the pace of skilled typists and certain combinations of letters in the English language would sometimes jam the sluggish machine.

In our digital era, the sluggishness of machines is no longer an issue, and yet the QWERTY arrangement still prevails worldwide. Curiously, the QWERTY arrangement is fundamentally universal – but locally configured – for all languages although it only addresses a specific problem for the English language. So why did the QWERTY system win in spite of more recent (and superior) alternatives that were developed specifically for modern technology in the form of computers? David and other path dependence writers propose that it has to do with the imperfection of markets, as will be elaborated on in the following.

When developing new technology one cannot always predict its innovative potential downstream. Although some technologies can be assessed as superior to their immediate competitors at a given moment in history and therefore gain a monopolistic position, such assessment is not always possible if the technologies perform equally well at the onset, and if the long term effects and applicability of each technology are unpredictable. So why does one prevail in the face of others in these situations? One answer could be that some technologies

⁵ Arthur, W. B. (1988). "Self-Reinforcing Mechanisms in Economics". The Economy as an Evolving Complex System. P. W. Anderson, K. J. arrow and D. Pines. Reading, MA, Addison-Wesley

Arthur, W. B. (1989). "Competing Technologies, Increasing Returns, and Lock-In by Historical Events." Economic Journal **99**: 116-31

David, P. (1985). "Clio and the Economics of QWERTY." American Economic Review **75**: 322-37

The Cancer Centre That Never Was

have better luck gaining adherence than other and even superior technologies⁶ e.g. the persistence of the rather odd arrangement of letters on the typewriter keyboard or the survival of the gas engine over steam engine motors. And this is where the concept of path dependence enters the scene: The consequence that small events and chance circumstances can bring forth solutions that locks one in on a particular path⁷. Following the above, the concept of path dependence in technological evolution implies that competition takes place between organisations embodying the technologies and making decisions to maximise their profit and opportunities in a competitive market, rather than taking place directly between the technologies per se.

In this perspective, path dependence is contingent with whatever shapes the organisations' decisions: Increasing monetary and/or societal returns in a broader sense. An essential part of the organisations' pursuit of such returns is engaging themselves in exchanges – *transactions* – in a competitive market characterised by scarcity⁸. When different individuals trade, they can deliver what they have agreed to (cooperation) or they can defect without paying their dues and thereby attempt to maximize their own wealth⁹. A defection would thus benefit the individual defector, but obviously not the other part of the trade – or the economy in general – as the act of trading would be conceived as too risky and the gains from trade would not be realized. Formal rules/constraints for trading are needed and so is and means of enforcement so that defection is punished and not seen as an attractive method for optimizing ones wealth or for gaining increasing ones personal gains.

According to economist and Nobel Laureate Douglass C. North, these assumptions are at the very core of neo-classical economic theory as it presupposes rational behaviour and sufficiently informed choices from the individual traders, when they enter ever efficient markets that will correct their choices through enforcement or lack of profit optimization, if they do not trade correctly or wisely¹⁰:

⁶ As put forward by Arthur in: Arthur, W. B. (1988). "Self-Reinforcing Mechanisms in Economics". The Economy as an Evolving Complex System. P. W. Anderson, K. J. Arrow and D. Pines. Reading, MA, Addison-Wesley

⁷ North, D. C. (1990). Institutions, Institutional Change And Economic Performance. New York, Cambridge University Press, p. 93-96.

⁸ Ibid., p. 11.

⁹ For more on the theoretical problem of cooperation vs. defection, see: Ibid., p. 13-16.

¹⁰ Ibid., p. 11.

The Cancer Centre That Never Was

If political and economic markets were efficient (i.e., there were zero transaction costs), then the choices made would always be efficient. That is the actors would always possess true models or if they initially possessed incorrect models the information feedback would correct them. But that version of the rational actor model has simply led us astray. The actors frequently must act on incomplete information and process the information that they do receive through mental constructs that can result in persistently inefficient paths.¹¹

According to North, the neo-classical economic theory has been a major contribution to knowledge, and its idea of perfect and efficient markets (in which the rational actor always has sufficient information to optimize wealth through costless transactions) does work relatively well in analysing markets in developed countries. It does not, however, succeed in explaining all types of markets and organisations e.g. medieval markets, the Champagne fairs or the continuous poor economic performance of third world countries¹². What the theory is missing is an understanding of the nature of human coordination and cooperation¹³. In other words, it does not account for the informal constraints that guide the actors' choices when trading in an imperfect market with high transaction costs because of incomplete information about the other bargaining parties and the potentially unstable circumstances of the trade. North calls these constraints "institutions":

Institutions include any form of constraints that human beings devise to shape human interaction. Are institutions formal or informal? They can be either, and I am interested both in formal constraints – such as rules that human beings devise – and informal constraints – such as conventions and codes of behaviour (...). Institutional constraints include both what individuals are prohibited from doing and, sometimes, under what conditions some individuals are permitted to undertake certain activities. As defined here, they therefore are the framework within which human interaction takes place. They are perfectly analogous to the rules of the game in a competitive team sport. That is, they consist of formal written rules as well as typically unwritten codes of conduct that underlie and supplement formal rules, such as not deliberately injuring a key player on the opposing team. And as this analogy would imply, the rules and informal codes are sometimes violated and punishment is enacted. Therefore, an essential part of the functioning of institutions is the costliness of ascertaining violations and the severity of punishment.”¹⁴

¹¹ Ibid., p. 8.

¹² Ibid., p. 11.

¹³ Ibid.

¹⁴ Ibid., p. 4.

The Cancer Centre That Never Was

Institutions, both formal and informal thus define the “game” and how it is to be played. The objective of anyone playing this game – be that individuals or organisations – is to win by employing strategy, skills and sometimes fair or foul means¹⁵.

North defines organisations as “groups of individuals bound by some common purpose to achieve objectives”¹⁶, such as e.g. political parties, educational bodies, economic bodies (e.g. firms) and social bodies (churches, clubs etc.). The institutional framework strongly affects which organisations emerge and how they thrive and evolve over time, inasmuch as organisations are created and develop as the result of the opportunities for wealth maximization the institutions allow for. Nevertheless, the organisations do in turn influence how institutions evolve as the organisations seek to maintain, expand or overthrow the existing institutions in order to gain, protect or increase their wealth¹⁷.

According to North, institutional change is a complicated process and the changes may happen through a change in rules, in informal constraints, in relative prices (such as taste and preferences¹⁸) and in the types and success of enforcement of the rules. However, the organisations’ complex web of contracts with each other makes institutional change typically incremental – and path dependent:

- 1) because large-scale change would affect too many existing organisations that might therefore oppose the change;
- 2) because revolution only occurs when competing organisations end up in a grid-lock situation that hinders any gains from trade in being made;
- 3) and because the incremental institutional changes will be broadly consistent with the existing institutional matrix and be governed by the know-how of the organisations and therefore make path dependence possible and likely¹⁹.

Institutions typically change incrementally rather than in discontinuous fashion. How and why they change incrementally and why even discontinuous changes (such as revolution and conquest) are never completely discontinuous is a result of the imbeddedness of informal constraints in societies. Although formal rules may change overnight as the result of political or juridical decisions, informal constraints embodied in customs, traditions, and codes of conduct are much more

¹⁵ Ibid., p. 5.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid., p. 84.

¹⁹ North, D. C. (2005). Understanding The Process Of Economic Change. Princeton, Princeton University Press, p. 62.

The Cancer Centre That Never Was

impervious to deliberate policies. These cultural constraints not only connect the past with the present and the future, but provide us with a key to explaining the path of historical change²⁰.

By criticising the idea of the zero-cost transaction and by emphasizing the importance of informal institutions in the dynamics of imperfect markets with costly transactions, North thus takes the path dependence concept a bit further than Arthur's and David's respective works on technological evolution. According to North, two forces shape the path of institutional change: Increasing returns and imperfect markets characterised by significant transaction costs. And whereas Arthur deals with the former, neither he nor David deals with the latter²¹. However, the existence of imperfect markets and insufficiently informed choices lend explanation to why some economies or individual organisations continue to perform poorly or continue to “get it wrong” so to speak. In the zero-transaction-cost model the long-run path will always be successful as the system rewards with increasing returns and corrects erroneous strategies with loss of return. Therefore divergent paths or persistent poor performance would not logically occur.

But if the markets are incomplete, the information feedback is fragmentary at best, and transaction costs are significant, then the subjective models of actors modified both by very imperfect feedback and by ideology will shape the path. Then, not only can both divergent paths and persistently poor performance prevail, the historically derived perceptions of the actors shape the choices that they make. In a dynamic world characterized by institutional increasing returns, the imperfect and fumbling efforts of the actors reflect the difficulties of deciphering a complex environment with the available mental constructs – ideas, theories, and ideologies.²²

1.2.2 Path dependence and historical writing

North's analytical and conceptual framework suggests that institutions typically change incrementally and according to the beliefs, knowledge and skills of organisations, and that this is the reason why path dependence occurs. North also shows that divergent paths can exist, and shifts from one path to another are possible when institutional change creates new opportunities for organisations to maximise their wealth by terminating one path and following another. This is a powerful analytical tool for historical writers, as illustrated in Kurt Jacobsen's historical

²⁰ North, D. C. (1990). Institutions, Institutional Change And Economic Performance. New York, Cambridge University Press, p. 6.

²¹ Ibid., p. 95.

²² Ibid., pp. 95-96.

The Cancer Centre That Never Was

analysis of the development of Danish telecom in which he describes how the almost 100 year long process of nationalizing the telephone companies was path dependent²³.

Jacobsen describes how the nationalization was constantly postponed as an arrangement of several private companies was successful in providing the telephone services and that the cost of altering this arrangement was too high, until a change in relative prices (new technology) and taste (neo-liberalism) rearranged the institutional matrix²⁴.

North's analytical and conceptual framework also takes into account the fallibility of humans in the face of ubiquitous uncertainty, and therefore also allows historians to describe the history of those who continuously seems to "get it wrong" by sticking to a path that never leads them to obtain their objectives:

We tend to get it wrong when the accumulated experiences and beliefs derived from the past do not provide a correct guide to future decision making. There are two reasons. The set of mental models, categories, and classifications of the neural networks that have evolved in our belief system through which the new evidence gets filtered have no existing patterns that can correctly assess the new evidence. And in cases where conflicting beliefs have evolved, the dominant organizations (and their entrepreneurs) may view the necessary changes as a threat to their survival. To the degree that the entrepreneurs of such organizations control decision making they can thwart the necessary changes. The first of these factors stems from our not correctly comprehending what is happening to us; the second, from an inability to make the necessary institutional adjustments²⁵.

For this reason, North's analytical and conceptual framework – and in particular his concept of path dependence – is the theoretical base of this thesis which analyses the history of *the cancer centre that never was*. That is, the history of a persistent, fruitless and sometimes even irrational pursuit of the idea of a public-private comprehensive cancer centre as the central organisational tool to strengthen Danish cancer research, epidemiology and treatment.

North's conceptual work on path dependence was created to explain phenomena within the fields of economics. How can it be used in historical analysis also? North's uses his concept of

²³ Jacobsen, K. (2005). "Institutional change and path dependence in Danish telecom development." Paper presented at the conference "Cross-Connections: Communications, Society and change", Science Museum London, 11-13 November 2005.: 1-16.

Jacobsen, K. (2004). *Jydsk Telefon - "Verdens bedste telefonselskab"*. København, Post og Tele Museum

²⁴ Jacobsen, K. (2005). "Institutional change and path dependence in Danish telecom development." Paper presented at the conference "Cross-Connections: Communications, Society and change", Science Museum London, 11-13 November 2005.: 1-16., p. 4.

²⁵ North, D. C. (2005). Understanding The Process Of Economic Change. Princeton, Princeton University Press, p. 117.

The Cancer Centre That Never Was

path dependence to explain economic performance, but it can be used as an operational analytical tool in other disciplines as well. Different takes on the concept of path dependence have already spread to a wide range of disciplines (such as studies of organisations, welfare models, medicine and philosophy) but has not yet gained ground in the study of history²⁶. A few historians have adopted the concept, but they use it in very different manners.

One example of historians with different takes on the concept of path dependence is the respective works of Harald Rinde and Kurt Jacobsen (see above) on the nationalization of Scandinavian telecom systems which in Norway and Denmark tended to go in different directions than the rest of Europe that leaned from an early onset, towards a more hegemonious state held organisational setup²⁷. Both historians set out to describe how the Norwegian and Danish system evolved from a multitude of private telecom companies toward different models of state monopoly or a mixture of state and private services. Likewise both historians introduce the concept of path dependence in their efforts to explain the respective national developments; but they do not use the concept in the same way.

Rinde seems to argue that the differences in how the two countries developed their telecom systems were due to contingent and situation-specific local conditions that shaped the path to be followed (thereby ensuring continuance), and his concept of path dependence owes to Paul David (previously mentioned in this thesis for his work on the QWERTY key arrangement). Kurt Jacobsen, on the other hand, adopts Douglass C. North's take on the concept of path dependence. The difference has been discussed in the above, as North takes the concept a bit further than David inasmuch as his theoretical framework enables him to analyse and explain the two forces shaping the path of institutional change; increasing returns and imperfect markets with significant transaction costs. With his theoretical framework, North delivers explanations to the events and institutions that shape the path, and his critique of the notion of zero-cost-transactions lends a nuanced explanation to why some actors/economies make insufficiently informed choices in imperfect markets and therefore continues to "get it wrong". This is not part of David's conceptual framework which is why Rinde's David-inspired tale of Norwegian path

²⁶ Jacobsen, K. (2005). "Institutional change and path dependence in Danish telecom development." Paper presented at the conference "Cross-Connections: Communications, Society and change", Science Museum London, 11-13 November 2005.: 1-16., p. 2.

²⁷ Ibid.

Jacobsen, K. (2004). Jydsk Telefon - "Verdens bedste telefonselskab". København, Post og Tele Museum.

Rinde, H. (2004). Kontingens og Kontinuitet: framveksten av stivhengige organisasjonsmønstre i Skandinavisk telefoni, Unipub Forlag.

The Cancer Centre That Never Was

dependence rests on – in a North perspective – unexamined contingent conditions that function as catalysts for a path dependent progressive development; and this endangers the analysis of appearing like a tale of straight forward causal relation between highlighted events like dominoes tipping over and moving the next in line. In other words; it is in danger of lacking sufficient explanation to the path's onset and choices made on the way – what shaped the path in the first place and what made the following process path dependent?

In contrast to the QWERTY case, both Rinde's and Jacobsen's telecom cases are not focused specifically on technological development. The stories are about the growth and organisation of systems and about complex actors in complex structures. Perhaps this is why Kurt Jacobsen, unlike Rinde, fully adopts North's analytical approach to path dependence and adapts this tool to his historical study as he explores the development of Danish telecom – not as an inevitable result of historical progress from initial contingent conditions, but as the result of actors making deliberate choices between alternative solutions under the influence of complex institutional matrices²⁸.

The difference between the two approaches would no doubt become even clearer if the case study were a story of continuously “getting it wrong” despite the presence of better alternatives. In such a case, the explanatory powers of North's focus on imperfect markets and insufficiently informed choices would become evident, and the concept of path dependence would really distinguish itself from what historians could otherwise be tempted to refer to as crude determinism.

For naturally, the idea that a specific “path” can influence and shape historical developments – that the development can be subject to “dependence” in whatever form – does not go down well with many historians who sees history as the complexity and unpredictability of any given situation²⁹. Any talk of path dependence in history is therefore in danger of being perceived as a subscription to the theory of determinism in which a historical development can be portrayed as an inevitable and foreordained account. However, this is not what North's concept of path dependence is about:

²⁸ Jacobsen, K. (2005). "Institutional change and path dependence in Danish telecom development." Paper presented at the conference "Cross-Connections: Communications, Society and change", Science Museum London, 11-13 November 2005.: 1-16., pp. 2-4.

²⁹ Ibid., p. 2.

For more on history and path dependence see: Hirsch, P. m. and J. J. Gillespie (2001). "Unpacking Path Dependence: Differential Valuations accorded History Across Disciplines". Path Dependence and Creation. R. Garud and P. Karnøe. Mahwa, Lawrence Erlbaum Associates, Inc. : 69-90, p. 70.

The Cancer Centre That Never Was

At every step along the way [of a given historical case, eds.] there were choices – political and economic – that provides real alternatives. Path dependence is a way to narrow down conceptually the choice set and link decision making through time. It is not a story of inevitability in which the past neatly predicts the future³⁰.

A historical development can only be said to display path dependence if, at any point in time, there were real alternatives to the chosen path, making it more than just a straight forward causal relation. And this is the case with the subject of this thesis. The thesis adopts North's and Jacobsen's take on path dependence to explain its central problem, hypothesis and case study. At all times, the organisations and entrepreneurs of the Danish cancer community could have explored other means to strengthen Danish cancer research and treatment than the organisational idea of the public-private comprehensive cancer centre. There were even pressing reasons to do so. Nevertheless, a period of 43 years passed until this idea was abandoned.

In summation, North therefore does not advocate determinism. He clearly states that path dependence means that history matters and that “we cannot understand today's choices (and define them in the modelling of economic performance) without tracing the incremental evolution of institutions”³¹. With his concept of path dependence, North integrates historicity in his conceptual framework for economic analysis, and this is why it can provide historians with a tool that offers path dependence perspectives beyond those of traditional historical criticism. And it is why North's use and definition of path dependence differentiates itself from the bulks of very diverse literature on the concept. In his own words:

How human societies attempt to shape their future leads us to deal directly with a fundamental aspect of the process of change – its historical nature. We cannot understand where we are going without an understanding of where we have been. How the past connects with the present and the future is the subject of path dependence – a term which is used, misused, and abused. It could mean nothing more than that choices in the present are constrained by the heritage of institutions accumulated from the past. But if that were all there was to path dependence then we could undertake radical change when we observed that the institutions were performing badly. A step toward a more comprehensive understanding of the term is to recognize that the institutions that have accumulated give rise to organizations whose survival depends on the perpetuation of those

³⁰ North, D. C. (1990). Institutions, Institutional Change And Economic Performance. New York, Cambridge University Press, pp. 98-99.

³¹ Ibid., p. 100.

The Cancer Centre That Never Was

institutions and which hence will devote resources to preventing any alteration that threatens their survival³².

The notion that organisations devote resources to preventing institutional change that will threaten their survival – while others will fight for the kind of change that will give them the opportunity to improve their position and maximize their wealth – seen together with the historicity of the concept of path dependence makes it an operational tool to analyse and answer the two main questions of this thesis: Why was the goal of building a public-private comprehensive cancer centre never reached, and why did 43 years pass before the idea of the centre was abandoned? An attempt to answer these questions by looking at the history of *the cancer centre that never was* as merely a succession of historical events would result in a description of a bunch of organisations making several irrational choices, while a path dependence perspective seems to offer an explanation to the seemingly irrational long-term development. It is central to this thesis to use North's concepts as a theoretical scaffold and to find out, *if in fact*, path dependence occurred in the story of this thesis.

It is part of this thesis' objective to demonstrate whether or not the concept of path dependence can be used as an analytical approach to the case; an approach that may turn out to be fruitless. However, it seems likely that path dependence have occurred as the efforts to establish a cancer centre continued for so long without results. Based on this, I have chosen to use the theoretical scaffold and the structuring measures seen in the writings of North and Jacobsen to analyse, manage and structure the sources and the case study. In the aforementioned article on path dependence and the nationalisation of Danish telephone companies, Jacobsen uses North's theory of the path-shaping interdependent relationship of institutions and organisations to divide the phenomenon of path dependence into several phases such as,

- 1) "path creation",
- 2) "path destruction",
- 3) "path termination"³³.

³² North, D. C. (2005). Understanding The Process Of Economic Change. Princeton, Princeton University Press, p. 51-52.

³³ Jacobsen, K. (2005). "Institutional change and path dependence in Danish telecom development." Paper presented at the conference "Cross-Connections: Communications, Society and change", Science Museum London, 11-13 November 2005.: 1-16., p.3.

The Cancer Centre That Never Was

Although North never uses these terms himself, they are very effective structural aids in illustrating the chronological process of the potential occurrence of path dependence, and this thesis will be structured accordingly. However, whereas Jacobsen describes the creation of a path that is eventually terminated for a clearly defined and better alternative, this is not the case in this thesis. A path is created which is why the chosen phase-structure of this thesis can be used to illustrate the occurrence or non-occurrence of path dependence. But unlike Jacobsen's case, this path is not terminated for some obvious alternative. On the contrary, it seems that the path is not so much terminated as it *dissolves* beneath the actors' feet along the way from 1949-1992, and this thesis aims to describe this process, and to find out whether or not it can be ascribed to path dependence.

The thesis will push the analysis further than what has already been done in the historical works of Jacobsen and the economical theory of North by adding a sociological element. Whereas Jacobsen and North deal with the interaction of organisations and institutions in a traditional commercial market context, this thesis will employ sociological concepts and tools to understand the choices and behavior of these organisations (and the individual actors they consist of) in an entirely different and predominantly non-commercial setting – the Danish cancer community – which the following chapters will show was shaped in great part by different organisations, individuals and sets of institutions than commercial organisations.

Even though the case study of this thesis takes place in a community of public organisations (such as medical faculties and hospitals) and a private cancer charity instead of in a setting of competing private companies striving to maximise their profits on the global market, the concept of institutions and path dependence still applies. North seeks to explain economic performance and development over time, but he does not explain these processes by referring to the interplay of e.g. economic conjunctures as if they were to be seen on a par with forces of nature in natural science. Nor does he (in his later works) advocate that the object of economic research can be explored under the same epistemological paradigm as natural science. His focus on *historicity* and path dependence symbiosis between institutions and organisations places him well within the realms of social sciences – an in particular organisation theory – as he insists that the defining structures of his theory – institutions – are created by organisations.

The Cancer Centre That Never Was

It is therefore not a stretch to use North's concepts to explain the ambitions and actions of individuals as well as organisations in the case study of this thesis. Much like economies or "the market", any social system is guided by rules and sets of institutions and in order to thrive, any actor has to know the rules of the game. Institutions – be it formal law, traditions of a professional society, or even family – exist because they reduce uncertainty and the cost of making decisions³⁴. However, as North has pointed out, if the accumulated knowledge or information about a trade is insufficient, wrong decisions can be made. It seems that in the non-commercial setting of this case study, the actors/organisations are not as much punished financially by their seemingly incorrect decisions as they are by negative feedback in a broader sociological and societal sense. In consequence thereof, they are probably even more prone to continuously "get it wrong" as North would have put it.

Because of the historicity of North's concepts of path dependence and institutional change, they are suitable to analyse processes over time. However, whereas North describes processes of institutional change and path dependence, he does not describe in any detail the social mechanisms between organisations and individuals that change the informal institutions or the conditions under which incremental change is most likely to occur. To use his own sports metaphor, he describes the rules of the game but not how it is played in practice or for that matter the arena it is played in. For this reason, this thesis combines North's concepts with the analytical tools of sociologist Pierre Bourdieu for a deeper analysis of stakeholder behaviour in the case study. As will be evident in the following section, Bourdieu takes on a more ahistorical and social constructionist epistemology than North and he focuses more on what defines the arena and its rules than its historical development. The combination of North and Bourdieu yields a socio-historical approach to the study of the complex web of multiple organisations and individuals that make out the story of *the cancer centre that never was*.

In the case study, we follow heterogeneous groupings of actors. It is not merely a matter of government bodies versus a cancer research community. The cancer research community is a very diverse collection of organisations and individuals with very different terms of existence and agendas. As such, the community cannot be described as an "organisation" in the sense of a group of people with a shared goal, even though they all aim to fight cancer. A classical

³⁴ Rolfstam, M. (2009). "Public procurement as an innovation policy tool: the role of institutions." Science and Public Policy 36(5): 349-360, p. 352.

The Cancer Centre That Never Was

organisational theory approach would be very misleading, as the community should rather be seen as a field of actors with shifting alliances. To illustrate this point, a short introduction to the heterogeneity of the cancer community is needed to set the scene for at further argumentation for the choice of a North-Bourdieu approach rather than – perhaps – more classical alternatives.

About the Danish cancer research community. Cancer research is being done in various forms and to various extents at the Danish universities, hospitals, special state “sector institutes” and private research institutes. Generally speaking, Danish universities were state-funded organisations with independent legal status up until 2003³⁵. In the late 20th century, the universities received their core funding through the State Budget, but the basic and applied research done there was also supported by grants-in-aid from State research councils and from different private companies and foundations. Cancer research was conducted at the faculties of science, medicine and agriculture, although not as an independent scientific discipline on a par with e.g. organic chemistry or plant physiology.

Today, most Danish hospitals count (cancer) research amongst their activities, but this has not always been the case as *treatment* rather than *research* was prioritised until the second half of the 20th century. The structure, financing and origin of the Danish hospital system will be elaborated on in the following chapters, but for now it will suffice to say that in Denmark there has traditionally been a local authority responsibility for building and running hospitals which dates back to a royal decree of 1806. Consequently, the country’s hospitals have had different types of ownerships but can in the 20th century generally be described as a three-tier governmental system consisting of: central state ownership (only one hospital, Rigshospitalet),

³⁵ Up until the late 19th century, the oldest Danish University, Copenhagen University (est. 1479) , had the status of being an independent and self-financing foundation with its own funds and capital. An arrangement with the Danish state ensured the university private property (former church owned estates) in return for educating civil servants/government officers. The university was financed out of the profits of these estates/properties, and was only controlled by the King (and later on the Ministry of Church and Education) on the issue of its teaching responsibilities. However, in the late 19th century, the university economy was increasingly weakened, and the outlook for survival without state subsidies was not good. In effect, the university received state funding for its continued operation, but due to legal condition in the Danish constitution, the university’s official status was not officially changed although it was commonly referred to as a state institute. Interestingly, the Danish constitution did not allow for a state-takeover of the legally independent university’s property rights, and therefore any newly established university building belonged to the university and not the state. The state, on the other hand, did not see it as a state responsibility to finance such new constructions, and the purchase and construction of university estate remained a non-state issue until as late as after World War II. So, in essence, the historically conditioned beginning of the country’s first university as estate-owner had long term effects on the status of the universities in Denmark which in the 20th century was financed through a multi tier system of allocations through the state budget, grants in aid from the states research councils, private foundations and companies and post World War II through state purchase and construction of buildings. For more on the above, see: Oxenløwe, R. H. (2006). "Bygninger, politik og penge". Lys over landet 1850-1920, Dansk Naturvidenskabs Historie bd. 3. P. C. Kjærsgaard. Århus, Aarhus Universitetsforlag: 61-95.

The Cancer Centre That Never Was

county ownership, and municipal ownership – all with each tier governed by a popularly elected body³⁶. Some hospitals are required to do research due to its close organisational links with the local university medical faculty, while research at other and for example municipally owned and operated hospitals is a completely voluntary activity done in the physician's spare time outside working hours³⁷. A small portion of the Danish cancer research is done at Statens Serum Institut which is the State's special lab and centre for the control of infectious diseases, referring directly to several of the governments ministries such as the Ministries of the Interior and Health.

However, the only organisation devoted entirely to cancer research is on private hands, the Danish Cancer Society, which both owns and operates several research institutes *and* supports cancer research at the publicly operated research facilities. Cancer research, as most Danish health care research, is heavily dependent on such private funding³⁸.

In summation, all the institutes, organisations or foundations that conduct cancer research - and therefore make up what one could call the Danish cancer field – are very diverse. It is not a homogenous field inasmuch as the actors and organisations have different terms of existence (funding, ownership, teaching/administration/research-ratio) and different professional backgrounds, social capital and organisational purposes, as will be elaborated on below. In order to understand this field with its heterogeneous organisations and the actors, North's conceptual focus on symbiosis between organisations and institutions in path dependence needs to be accompanied by a complementary sociological approach to explain the creation and anatomy of the institutions/field in question. An approach more finely tuned to analyse the *behaviour* of organisations and individuals than North's. The concepts and analytical tools of Pierre Bourdieu meet this requirement, as will be described below.

1.2.3 North, Bourdieu and their takes on the "rules of the game"

Combining North and Bourdieu in a theoretical frame for this thesis requires some further elaboration on their similarities, differences and use in the context of the case study. At first, North's take on institutional change will be described, followed by an introduction to Pierre

³⁶ Haave, P. (2006). "The Hospital Sector - a four county comparison of organisational and political development". *The Nordic Model of Welfare*. N. F. Christiansen, K. Petersen, N. Edling and P. Haave. Copenhagen, Museum Tusculanum Press: 215-242, p. 218-19.

³⁷ Larsen, P. O. (2003). *Forskningens Verden - Prydhave, Nyttehave, Vildnis*, Aarhus Universitetsforlag, p. 76.

³⁸ Ibid., p. 77. While the Danish medical industry has since taken a strong interest in cancer research, this was not the case from 1949-1992. Originally a private light therapy clinic, the Finsen Institute, conducted clinical cancer research. In the 1980's, however the Finsen Institute was organizationally fused with the state owned university hospital, Rigshospitalet, and the cancer research groups thus became state-funded.

The Cancer Centre That Never Was

Bourdieu and the case relevant parts of his conceptual work. Last, the epistemological differences and similarities between the two theoreticians will be analysed in order to describe the potential and limits to their complementarity and their use in this thesis.

To North, formal and informal institutions make out “the rules of the game” when different organisations and individuals trades. He argues that organisations will strive to either maintain or change the institutional matrix to ensure the best possible frames for their survival and maximisation of wealth. Sometimes, this will result in conflicts between organisations which have different aims and which are affected differently by the existing institutions.

Stability derives from the fact that there are a large number of specific constraints that affect a particular choice, such as those described in the sale of a residential property. Significant changes in this institutional framework involve a host of changes in a variety of constraints, not only legal constraints but norms of behaviour as well. Although the institutional constraints may not be ideal or efficient for one set of individuals involved in a particular exchange and therefore those parties would like to restructure the institutions, the same set of institutions for other sets of choices may still reflect as efficient a bargain as is possible. Moreover it is the bargaining strength of the individuals and organizations that counts. Hence, only when it is in the interest of those with sufficient strength to alter the formal rules will there be major changes in the formal institutional framework. At the same time, the complex of informal and formal constraints makes possible continual incremental changes at particular margins. These small changes in both formal rules and informal constraints will gradually alter the institutional framework over time, so that it evolves into a different set of choices than it began with.³⁹

The concept of continual incremental change of institutions at particular margins can help explain the behaviour of the actors in the case study: their changing choices and attitudes towards the idea of a cancer centre at different times and under different conditions. In other words, the concept can help describe how a change of heart is closely correlated with how much the existing institutional matrix works against or for an organisation at any given time. But North does not, however, sufficiently explain the social mechanisms by which a group or organisation in a community can manage to instate, change or preserve favourable institutions when others fail at doing so. He briefly touches the topic in the following – but never in depth.

Organizations with sufficient bargaining strength will use the polity to achieve objectives when the payoff from maximizing in that direction exceeds the payoff from investing within the existing constraints. But the incremental change in the overall institutional framework is more comprehensive than what happens when economic organizations devote resources to changing political rules directly to increase their profitability.

³⁹ North, D. C. (1990). Institutions, Institutional Change And Economic Performance. New York, Cambridge University Press, p. 68.

The Cancer Centre That Never Was

Organizations will also encourage the society to invest in the kinds of skills and knowledge that indirectly contribute to their profitability⁴⁰.

Continual incremental change means that the exchanging organisations gain new opportunities to recontract and potentially capture any gains from trade, however in gridlock crisis situations none of the involved parties are likely to have the strength to win by themselves and they therefore form coalitions and make deals with other interest groups – be that specific organisations or the goodwill of society in general⁴¹. If the organisations fail to set “a winning team” or lack a framework to settle disputes, the gridlock remains and the gains from trade cannot be realised which is eventually harmful for both the weakest and the strongest party. In these situations, North speaks of revolutions, where entrepreneurs may try to reach their goals and break the deadlock by employing severe means. In some markets, this means strikes, conflicts and protests etc. In the case of the cancer centre that never was, it was negative media campaigns as will be described in a later chapter.

While North’s conceptual and analytical apparatus will serve as the overall framework of this thesis, something “more” is needed to clarify what is going on in such condensed situations where conflicts, interests, choices, path dependence and institutional change interact; that is, operational tools for an even more extensive sociological analysis of these situations than what North offers. To this end the theories of French sociologist Pierre Bourdieu, who describes how a cultural entity (or *field*) such as e.g. cancer research can be dominated by its practitioners’ struggles to improve their position in an ever changing hierarchy, are both relevant and complementary to North’s conceptual framework. Complementary in the sense that they describe in detail the sociological mechanisms which according to Bourdieu dictate who and what “sets the rules” in the social game of transactions as described by North.

Bourdieu and the social field

According to Bourdieu, a *field* emerges where different individuals or groups compete for symbolic or material resources. The field is a meshwork of objective “structures” that through a process of internalisation – the actors’ “habitus” e.g. gender, upbringing, education – guide the actor in his or her everyday decisions and choice of strategies. The different actors do not have the same authority, resources or standing in the field, and they thus engage in a constant struggle to move further up in the hierarchy, or in other words, to have “symbolic capital”⁴². Actors with

⁴⁰ Ibid., p. 79.

⁴¹ Ibid., p. 90.

⁴² Bourdieu, P. (1977). Outline of a Theory of Practice. Cambridge, Cambridge University Press, p. 177.

The Cancer Centre That Never Was

this specific type of capital have the power to define which resources are legitimate and powerful in a field. The question of how much power an actor can achieve depends on the amount and form of resources or “capital” that she or he possesses⁴³.

Besides “symbolic capital”, Bourdieu operates with three other general forms of capital: *economic*, *social*, and *cultural*. The first form springs from the actor’s property, financial situation or skills. The second has to do with the actor’s ability to network or establish meaningful relationships with other human beings and his social or scientific authority⁴⁴. The third form most often has to do with the actor’s level of education. Actors are ascribed certain quanta of different and interchangeable types of capital, and they strive to impose their form of capital as the predominant form, thereby gaining “symbolic capital” and power. As a result, the field becomes a dynamic arena of constant power struggles, where the actors try to undermine each other’s form of capital and thereby create new hierarchies. The field is thus never a steady-state rigid construction. It is as dynamic as the conflicts that polarise it. In other words, “a field is a space in which powers struggle – not only to manifest the meaning of it – but also to restructure it. It thus constantly changes its nature. The causal connections of a field in any given moment (...) emerge from conflicts and competition and not from a structurally immanent logic of development.”⁴⁵

According to Bourdieu, the driving force of a social field is the economic practice and strategies of the actors to improve their situation in the field which would cease to exist the moment any one dominant group or person has eliminated all opposition. Even the rules the actors play by are constantly being questioned and changed by the actors themselves. The social field is consequently not a designed system with an intended purpose, nor is it to be seen as a well-greased machine that functions effortlessly through an almost mechanical logic⁴⁶.

Bourdieu’s actors employ strategies to satisfy their personal interests (e.g. visibility and authority) in the field. For the researchers presented in this case study it could mean a strategy to secure better funding of their research activities, to establish their professional status and standing etc.:

⁴³ Bourdieu, P. and L. J. D. Wacquant (2004). *Refleksiv Sociologi*. København, Hans Reitzels Forlag, p. 86-87, 89.

⁴⁴ Bourdieu, P. (1979). "The specificity of the scientific field and the social conditions of the progress of reason." *Soc. sci. inform.* 14(6): 19-47, p. 25.

⁴⁵ Bourdieu, P. and L. J. D. Wacquant (2004). *Refleksiv Sociologi*. København, Hans Reitzels Forlag p. 85. (My translation).

⁴⁶ Ibid. p. 251.

The Cancer Centre That Never Was

In the struggle in which every agent must engage in order to force recognition of the value of his products and his own authority as a legitimate producer, what is at stake is in fact the power to impose the definition of science (i.e. the delimitation of the field of the problems, methods and theories that may be regarded as scientific) best suited to his specific interests, i.e. the definition most likely to enable him to occupy the dominant position in full legitimacy, by attributing the highest position in the hierarchy of scientific values to the scientific capacities which he personally or institutionally possesses (e.g. by being highly trained in mathematics, having studied at a particular educational institution, being a member of a particular scientific institution, etc.).⁴⁷

The market for scientific goods has its own laws, and they have nothing to do with ethics. And, if we are to avoid creating a place in the science of science, under various “scientific” names, for what agents sometimes call the “values” or the “traditions” of the “scientific community”, we need to be able to recognise as such the strategies which, in universes in which people tend to have an interest in being disinterested, tend to disguise strategies.⁴⁸

Bourdieu defines the strategies of his actors as plans for either conservation or subversion of the power-balance motivated by their interests and including means to be employed to satisfy these interests.⁴⁹ The interests, again, depend strongly on the actor’s position in the field (such as scientific authority) and the power it gives them over the field.

Bourdieu also presents a special concept of *professional logics*. In chapter 2 of his “Homo Academicus”⁵⁰, Bourdieu argues that different professional groups are guided by different logics – that is the overall norms and goals that unify and identify the group from others. These logics refer to Bourdieu’s theory that we usually act according to a meshwork of objective structures in our fields which through a process of internalisation (our *habitus*) guide our everyday choices and preferences. But in contrast to Bourdieu’s term “*habitus*”, the notion of professional logics does not seem to depend on the actors’ sexuality, gender, and race, but primarily on their education, age, professional position, and institutional affiliation. Sometimes these logics prevent the professional groups from seeing eye to eye on essential matters such as e.g. the content and management of a cancer centre which is at the heart of this thesis.

⁴⁷ Bourdieu, P. (1979). "The specificity of the scientific field and the social conditions of the progress of reason." *Soc. sci. inform.* 14(6): 19-47, p. 23.

⁴⁸ Ibid., p. 26.

⁴⁹ Ibid., p. 29.

⁵⁰ Here Bourdieu describes the relation between two systems of differences, on the one hand the type of discipline (law and medicine versus natural and human sciences) or of research (clinical versus basic research) with their different norms, goals and interest, and on the other hand a series of social properties such as income, political persuasion, and addresses between different professional groups at the different faculties of a French university. This type of extremely time-consuming research is not the aim in this work on the history of the never-existing cancer-centre. See: Bourdieu, P. (1996). *Homo Academicus*. stockholm, Det Lilla Förlaget, throughout chapter 2.

The Cancer Centre That Never Was

Bourdieu has developed a set of concepts (field, habitus, capital) to help explain the complex and dynamic mechanisms by which we all act in the social world – for example in our families, our communities and the clubs and associations we join. His notion of professional logics lends explanatory power to our behaviour in professional milieus such as our work places. But Bourdieu also offers a concept to explain what North does not: why some groups and individuals have the power to define “the rules of the game” while others do not. This concept is called “doxa”.

Practical action may be describes by analogy with the orthé doxa of Plato in Meno, as “the right opinion”: the coincidence between dispositions and positions, between “sense of game” and the game, explains that the agent does “what he or she has to do” without posing it explicitly as a goal, below the level of calculation and even consciousness, beneath discourse and representation.⁵¹

To Bourdieu, the concept of doxa is a collective sense of habitus in a field. It is what assigns symbolic and dominant status to specific forms of capital over others. Doxa is deep founded and unconscious beliefs and values that are taken as self-evident truths by all agents/actors in a given field. It guides the actors’ actions and thoughts and tends to favour a social arrangement in the field, through which dominant groups remain at power as their position is considered natural and perhaps even beneficial for all. According to Schwartz (1997), this means that Bourdieu is taking a cue from Marxian materialism inasmuch as his concept of doxa becomes a historical construct that produces and reproduces the dominant group and the dominated group in the social world, although Bourdieu opposed and analysis of society based solely on economic classes or ideologies⁵². Doxa is what makes individuals learn what the specific social conditions make possible for them: their place in a social field as defined through language, values, education, methods of classifications and everyday life activities. From this, habitus is the lasting dispositions for thoughts, preferences and actions an individual develops in response to objective conditions (family structure, wealth/poverty, network, health etc.) it meets.

Habitus and its collective form doxa thus play important roles in the process of social reproduction, as they instruct actors in striving only for what is relatively accessible to them. That is why revolution is so relatively rare even in class struggles⁵³. According to Bourdieu, even crisis and situations in which doxa may not seem self-evident to all do not necessarily

⁵¹ Bourdieu, P. and L. J. D. Wacquant (1992). *An Invitation to Reflexive Sociology*. Chicago, Chicago University Press, p. 128.

⁵² Schwartz, D. (1997). *Culture and Power: the Sociology of Pierre Bourdieu*. Chicago, University of Chicago Press.

⁵³ Bourdieu, P. (1977). *Outline of a Theory of Practice*. Cambridge, Cambridge University Press, p. 170.

The Cancer Centre That Never Was

result in a redistribution of power or a change in the social arrangement of a field as “crisis is a necessary condition for a questioning of doxa but not in itself a sufficient condition for the production of critical discourse”⁵⁴. However, power struggles within the the social groups conditioned to have power (through wealth, education etc.) is constant, as doxa/habitus makes the power and wealth well within reach of these actors. Also, as Bourdieu views habitus as a dynamic concept able to change over time through reactions to the the context, conditions and field the agents/actors encounter and engage in, his theory can be used to explain how people can resist dominance in one field and express complicity in another⁵⁵. Context and environment are determining factors on an agent’s habitus, which is why the constant interplay of agency and structures make agents experience power differently and react differently depending on which field they are in: public, private or intimate arenas of power.

In summation, Bourdieu’s focus on dispositions is an internalisation of the objective conditions met in the social turned into subjective patterns of thought and action. As a consequence, the field exists only as far as there are individuals acting in it through their habitus and doxa; but at the same time a habitus is a transformation of the seemingly objective structures of the field into dispositions guiding the individuals’ actions. Field and habitus/doxa are thus interrelated and the condition for each others existence. By being part of a field, an actor integrates into their habitus a set of rules allowing them to affect the field. As such it is a circular relationship in which habitus defines the structure of the field, while the field affects the transition from habitus to action.

Epistemological and ontological similarities and differences between Bourdieu and North

With the interrelationships between field and habitus, Bourdieu tries to bridge the objective-subjective antinomy of the social sciences, where different schools of thought have debated whether human behaviour is best explained through objective and overarching social laws (structures) or through subjective processes, where the individual mind creates and reacts to a perceived social reality (social phenomenologists). Bourdieu seeks a middleground conceptually by creating a subtle interplay between his concepts of field and habitus thorough the *dispositions* of the individual. To Bourdieu, the social world is objective only in the sense that social scientists can realise it, and it is in effect thus a symbolic and subjective world of relations rather

⁵⁴ Ibid.. P. 169.

⁵⁵ Moncrieffe, J. (2006). "The Power of Stigma: Encounters with "Street Children" and "Restavecs" in Haiti." IDS Bulletin 37(6): 31-46, p. 37.

than one of objective substances⁵⁶. In this respect, Bourdieu's basic ontological assumptions about the social world are of an anti-realist, subjective nature: the point of view creates the (social) object. He does, however, assign limits to the creative freedom of the constructors/actors in their design of the world (the construct), as it is restricted by the doxa, habitus and social conditions of society. And this is where Bourdieu's ontological view gets more nuances: The world is a relational hyper-reality in which social constructions appear real and independent of us. Although social objects are subjectively created they turn "objective" through their relations with other people's social constructs – the world is thus a world of relations.

Bourdieu's attempts to overcome the binary objectivism-subjectivism structure in his theory make his ontological assumptions about the world a bit diffuse. While he stresses, that the world is constructed through the theoretical frames of social scientists influencing perceived social reality through the lense of their theory of choice⁵⁷, his concept of habitus is a hybrid structure of subjectivity and objectivity reflects a recognition of a perceived objectivity of social structures with real impact on our every day lives. Similarly, Bourdieu sets out to create a *practical epistemology* for the study of the interplay of agency and structures in the social world. So even though Bourdieu is generally a subjectivist rooted in the belief that the social world is a social construct, he assigns some objective status to the phenomena subjectively created by one individual, when they interact with those created by other individuals. The interaction of those phenomena defines and demarcates the social world and can be studied by social researchers.

So how does this correlate with the theoretical works of Douglass C. North, a theoreticist from the academic field of economics which Bourdieu describes as a discipline traditionally practised without concern for social relations through a (crude) focus on the laws of interested calculation, competition, or exploitation? When writing about the interplay of social rules and archaic "good faith" economy, it seems Bourdieu indirectly asks for a sociological element of explanation in neoclassical economy:

In reducing the economy to its objective reality, economism annihilates the specificity located precisely in the socially maintained discrepancy between the misrecognized or, one might say, socially repressed, objective truth of economic activity, and the social representation of production and exchange. It is no accident that the vocabulary of the archaic economy should be entirely

⁵⁶ Bourdieu, P. (1980). The Logic of Practice. Stanford, Stanford University Press, p. 30.

⁵⁷ Ibid.

The Cancer Centre That Never Was

composed of double-sided notions that are condemned to disintegrate in the course of history of the economy, since, owing to their duality, the social relations they designate represents unstable structures which are condemned to split in two as soon as there is a weakening of the social mechanisms aimed at maintaining them⁵⁸.

This plays well into the theoretical works of North (his later works) and his concepts of path dependence and institutionalised economy that mark a theoretical break from neo-classical economy thinking. The economist North is rooted in a more realist assumption about the ontological status of the objects of his research and he adopts a more objectivist epistemological stance than Bourdieu. But the lines are far from clear cut. In his later works, North is leaving behind his early epistemological demands of Popperian theory falsification and taking a small step towards a more subjective epistemology. As is described above, North does not liken economical core concepts such as market mechanisms with innate, determining structures on a par with natural constants. To him, economic transactions are not flawless machinery inevitably correcting human action. On the contrary, North states that trades are made by humans; that when trading we cannot always gain sufficient information about the trade and the other trader; and that we are thus in danger of making incorrect decisions that will not necessarily be corrected by market forces for historic and behavioral reasons better described by sociology than traditional economics – path dependence.

So even though they may come from each their ontological stance and disciplinary positions North's concepts of institutions and path dependence and Bourdieu's concepts of habitus, fields, power, forms of capital and professional logics reflect a very similar view of the social world as a dynamic changing place of constructs. A world that is affecting and being affected by individual and organisational strive for survival, improvement of social/economic/political bargaining power, and the constraints these actors impose on themselves. From each their side of the subjective-objective antinomy continuum, they both try to balance the explanatory power of overall structures versus individual agency in their respective fields of research. North's formal and informal institutions are quite compatible with Bourdieu's collective concepts of habitus, doxa and capital inasmuch as they all describe the often intangible processes reproducing social structures in a field – defining both the rules of the game and the game itself.

North will be used as the overall conceptual and analytical framework of this thesis while Bourdieu offers an even finer tuned set of tools to explain the actors' behaviour in the

⁵⁸ Bourdieu, P. (1977). Outline of a Theory of Practice. Cambridge, Cambridge University Press, p. 172.

The Cancer Centre That Never Was

condensed situations of the thesis case story that may reveal the occurrence of path dependence. Together, their concepts can help identify if in fact path dependence has occurred in the case study – and why.

Also the thesis adopts a North-Bourdieuian model for its institutional analysis because it lends differentiated tools to address the different levels – or layers – of the development it addresses and the interaction between them. That is, a multilevel analysis for a multilevel problem. And what does this mean? It means that the puzzle of *the cancer centre that never was* involves various exogenous and endogenous factors corresponding to formal and informal constraints created by different levels actors or phenomena (eg. global, state, organisational and individual levels).

An attempt to explain the story of this thesis from any one of these levels alone would be too simplistic. For example, you cannot explain the demise of a cancer centre by referring to a global level financial crisis alone, even though it did influence the economic performance of all the planning parties and the institutional setting on all other levels. This is not the same as to say that all levels or factors should be given equal importance in the matter. Indeed, a challenge for the institutional analyst must be to identify the appropriate focus in the the puzzle he wishes to address and to balance the complex factors against each other to avoid over-simplifying or over-complicating the matter⁵⁹.

For institutional analysis comes with a part-wholeness problem inasmuch as institutions may consist of other institutions and/or be part of yet others again. For this reason the present thesis will attempt to focus on the organisational level (e.g. the Danish Cancer Society, the university, the hospitals, and the subdepartments of all of these) in order to maintain some focal point for the reader, but it will go down or up one or several levels to lend detailed explanatory power to the dealings on this level when needed. For a sole focus on the organisational level would both be too simplistic but also somewhat impossible to uphold faithfully, as organisations themselves are made of stakeholders that over time shift organisationl affiliations or go solo with different agendas and informal institutions. For instance, within both North's and Bourdieu's analytical frames, it is important to identify the organisations that are for and those that are against maintaining the existing institutional framework.

⁵⁹ Orstrom, E. (2005). Understanding institutional diversity. New Jersey (USA), Woodstock (UK), Princeton University Press, p. 12.

The Cancer Centre That Never Was

In this thesis, a range of entrepreneurs and organisations do at some point in history try to either change or maintain the institutional matrix using the idea of the cancer centre as both the means and/or the end to do so. However, the groupings change along the way and they are very heterogeneous to the point that they might seem as nothing more than clusters of people who coincidentally acted in the same way on the issue of the establishment of cancer centres. By using Bourdieu and his concept of habitus and the notion professional logic, and by looking at the pertinent properties that made the actors of this case study inclined to act in certain ways regarding the planning for the cancer centre, one could no doubt yield a much more nuanced division of the actors and organisations into numerous groupings – e.g. basic scientists vs. clinicians vs. research administrators – but the mere amount of emerging groupings and sub groupings⁶⁰ would blur rather than clarify the analysis of why the cancer centre never came into existence. So instead of using Bourdieu's concepts to create archetypical groupings based on professional logic, they will be used to explain, from a sociological perspective, why organisations and individual entrepreneurs chose to expand or maintain the institutional matrix with regards to the planning for the cancer centre. In other words, Bourdieu's sociologically rooted tools complement North's economic framework in describing and analysing these dynamic groupings in the cancer community⁶¹ where the case study takes place.

1.2.4 Choice of theory

Other theoretical frames have been suggested for this thesis along the way including a series of different organisation theory approaches and also game theory. As shown in the above, this thesis does not deal with one single organisation – or even the interaction of a limited number of

⁶⁰ These groupings would be opposed to each other – and therefore be distinct from each other – on some issues and overlap on others, on issues such as research management, the role of basic sciences in cancer research, the appropriateness of business strategies in a private cancer charity, and the cancer charity's need for asset management and PR. For this reason, such fluctuating groups would not be very operational, and this thesis will focus on the abovementioned two which may be heterogeneous but within North's conceptual framework and the path dependence perspective, they serve the purpose of explaining the story of the cancer centre that never was as something more than just a succession of historical events.

⁶¹ Here I use "cancer community" as a term denominating a broad group consisting of the different researchers, physicians, institutions, professional societies and charities that worked on cancer research, treatment, control (such as public education), political lobbying, and fundraising for cancer projects. In other words, both the grant receivers in the public and private cancer laboratories and the funding authorities such as the Danish Cancer Society. In this respect, my use of the term parallels that of James T. Patterson, who uses terms such as "alliances against cancer" and "the cancer establishment". Patterson, J. T. (1987). *The Dread Disease: Cancer and Modern American Culture*. Cambridge, Harvard University Press, p. 82, p. 266 & p. 286. However, Bourdieu would not have approved of this use of the word "community" as it gives a false sense of unity. It is more pragmatic to use this term instead of always having to write "researchers, physicians, societies, charities, and administrators affiliated with the cancer research field", though. Aside from this pragmatic reservation, I do agree with Bourdieu. When Bourdieu himself at one point does use the term "scientific community", he adds that it would be better to call it "a club open only to native and adopted members of the Ivy League." Bourdieu, P. (1979). "The specificity of the scientific field and the social conditions of the progress of reason." *Soc. sci. inform.* 14(6): 19-47, p. 38.

The Cancer Centre That Never Was

organisations with clearly defined membership, values, strategies and interests. The case study describes a multitude of organisations with interchangeable memberships, individuals counteracting their organisational affiliation, individuals acting without apparent organisational affiliation etc. The study's gallery of actors is therefore too complex to lend itself to a classical analysis of individual organisations and their place in a well defined politico-economical ecosystem. The members of the organisations do not necessarily act as a collective organisational body. They typically act as individuals representing both organisational and individual interests: e.g. a public cancer researcher who also serves as a member of the Scientific Council of the private Danish Cancer Society. For this reason, the case study cannot rest on organisation level analysis alone.

Niels Åkerstrøm Andersen's works on partnerships between organisations has been specifically suggested as a possible alternative to the thesis' current theoretical framework. With regards to topic, Åkerstrøm Andersen's work would seem a good fit for the case study of this thesis, as it centers on several organisations' attempts to co-create a cancer centre. Åkerstrøm Andersen describes the benefits and the fallpits of partnerships between different organisations (public, private, NGO's) in their pursuit for shared goals such as symbiotic co-existence, co-creation, solution to societal challenges and so forth. He describes how classical contract-mediated collaborations like licitations and traditional Public-Private-Partnering pose serious risks for reduction of the innovative potential and benefit of the partnerships, as the contract can lead to a passive client-supplier relationship where power distribution is uneven⁶². A fruitful partnership, on the contrary, must be more equal and address possible shared goals and strategies in an open and mutually beneficial manner. The partnership becomes an alternative in society to "outsourcing, an alternative to sectoral break-ups, an alternative to state, market and civil society respectively, and also a mediator between these"⁶³.

In this respect, Åkerstrøm Andersen bases his approach to partnerships on sociologist Niklas Luhman's view on interactive systems. In his body of work, Luhmann describes society as a system of independent (and atopoietic) subsystems such as e.g. family, law, economy, politics or even commercial organisations, which closes themselves comminatively from their surroundings through the use of historically differentiated interaction-modes and communication

⁶² Andersen, N. Å. (2008). Partnerships: Machines of Possibility. Bristol, Policy Press.

⁶³ Ibid.. P. 137.

The Cancer Centre That Never Was

– codes⁶⁴. To Luhmann, social systems built these differences in the actors/subsystem communications on how they see the world and which are the basis of the decisions they make. In particular, Luhmann points to his concept of reflexive communication to describe an organisation's ability to reflect upon its own world perception in contrast to others and formulate survival strategies and decisions based on this⁶⁵. In fact, decisions are the central element of any organisation⁶⁶.

To Luhmann, decisions are not to be seen as choices that are transformed into action. They are open scenarios for the future that are turned into fixed scenarios for the future through communication in concert with social expectations. More often than not, it will only be possible to know that a decision has been made in hindsight, when one can meaningfully link a given action and its premises to a prior communication effort⁶⁷.

Åkerstrøm Andersen's use of Luhmann serves the purpose of presenting partnerships as "machines of possibilities" not accessible by the partners by themselves. Through a viable and effortless partnership, organisations can open the door to new opportunities for business development, cost-efficient operation, new innovative services/products etc. Naturally, the good partnership needs a lot of preparation and translation so that two different subsystems can interact without problems. And according to Åkerstrøm Andersen, a tool for this would be Luhmann's take on communication. In this respect, partnerships are seen as constructions with special legitimacy due to their communication ability to carry out opposing expectations from the partners. As such, the concept of partnership could have been used to point to faulty communication as the reason why the proposed partnership surrounding the establishment of a Danish cancer research centre was never successful.

But though Åkerstrøm Andersen and Luhmann can identify right and wrong ways to go about the communicative actions needed to fuse interests and create partnerships between organisations with different value and goals, they cannot account for the surprisingly long time span of 43 years that passed before the particular partnership for a cancer centre was deemed unfavourable. And this is the reason why North's concept of path dependence has been chosen

⁶⁴ Luhmann, N. (1999). *Die Gesellschaft der Gesellschaft*, Suhrkamp Taschenbuch Wissenschaft, p. 72, 190.

⁶⁵ Luhmann, N. (2013). *Indføring i systemteorien*, Unge Pædagoger.

⁶⁶ Luhmann, N. (2006). *Organisation und Entscheidung*, Wiesbaden, VS Verlag für Socialwissenschaften, p. 46, 63.

⁶⁷ Luhmann, N. (2003). "Beslutningens paradoks". *Organiseret Kommunikation*. Højlund and Knudsen. Frederiksberg, Samfundslitteratur, p. 83.

to uncover possible rationality in a seemingly irrational historical development. As described above, the choice of Bourdieu as the complementary theoretical addition owes to North's and Bourdieu's common view on individuals, organisations and their attempt to bridge the gap between overall structures and individual agency as the main explanatory factor in human behaviour. Bourdieu's conceptual interrelationship between field and habitus makes for a more practical study of individual behaviour than e.g. Luhmann's more abstract focus on communication. While Luhmann illustrates important challenges regarding the manner information and messages from organisations are communicated and received by other organisations, Bourdieu's conceptual frame can account for the "blind spots" organisations have about each other's motivation, and for the powerstruggle that sometimes leads to alliances and sometimes to irreconcilable conflicts and defection from contracts or informal deals.

Game theory has also been suggested as a matrix to explain actor behaviour (such as defection) in the case study. Originally developed by mathematicians John Nash and John Von Neumann as a mathematical model to explain game strategy, game theory has since been introduced in social sciences to explain the interaction people have with each other. As such, human behaviour is likened with a game with winners, losers, rewards and punishments. Game theory describes different types of interactions/games and the strategies which the players will logically employ in the games under different conditions (e.g. zero-sum-games, Prisoner's Dilemma). Game theorists investigate strategic interaction between two or more actors – individuals, corporate or other. They deal with four types of interdependencies/rules: 1) that rewards of each depend on the choices of all players, 2) that the rewards of each depend on the rewards of all through e.g. envy, altruism and solidarity, 3) that the choice/action of each depends on the choices of all through strategic reasoning and finally, 4) that the desire to play of each depends on the actions of all through individual preferences and plans being social in their origin⁶⁸. Game theory cannot deal in details with the latter – the social origins of actor preferences – and this makes the North-Bourdieu frame preferable in the present thesis. In addition, game theory implies further a series of assumptions that are not compatible with the thesis case study:

- 1) The payoffs are known by all players and fixed.
- 2) The number of players is fixed and they are known by all.

⁶⁸ Petersen, T. (1994). "On the Promise of Game Theory on Sociology." *Contemporary Sociology* 23(4): 498-502, p. 498.

- 3) All players behave rationally.
- 4) The rules of the game are common knowledge.

According to critics, this means that when used in social studies, game theory makes largely unrealistic assumptions about the players: complete, shared and valid knowledge about the game to be played⁶⁹. Such an assumption is in direct opposition to North's path dependence concept and argument that actors make mistakes because they will sometimes make transactions based on incomplete information about the trade itself and about the other traders. If game theory was to be used on the case study of this thesis – the 43 years of fruitless planning for a cancer centre in the face of better alternatives – it would render the development irrational and inexplicable. This is why North and Bourdieu have been preferred for this thesis.

1.3 The semantics of the thesis: talking about “cancer research”

A series of terms and concepts will be used consistently throughout the thesis such as “cancer”, “cancer research” and “cancer centre”. These terms are semantically loaded and an introduction to their use and meaning in this thesis is therefore needed. In order to do so, a historic context will be presented in the following.

In Denmark, as in most other countries, cancer research as a general research area has not been established as a discipline at the universities on a par with e.g. physiology inasmuch as there is not a department dedicated for “cancer research” specifically. The medical profession has traditionally been arranged in specialist areas, with each their individually designed education packages, professional societies, journals, status and place at the hospitals and at the medical faculties and in some cases at special private practices as well⁷⁰. In Denmark, though, oncology was not accepted by the medical community as a specialty until as late as 2004⁷¹. The field of oncology stemmed from a strong radiological tradition in Denmark, but with the introduction of chemotherapy in the 1960's, the field grew more complex and diverse and was practiced as an interest-activity within many different well-established specialities such as general medicine, radiology and so forth. So, cancer research and even oncology was not a separate scientific discipline or medical speciality in Denmark in the space of time covered by this thesis. In fact,

⁶⁹ Burns, T. R. and E. Roszkowska (2005). "Generalised Game Theory: Assumptions, principles and elaborators grounded in social theory." *studies in Logic, Grammar and Rhetorics* **21**(8): 7-40, p. 10.

⁷⁰ Jacobsen, K. and K. Larsen (2007). *Ve og Velfærd - Læger, sundhed og samfund gennem 200 år*. København, Lindhardt og Ringhof. , pp. 253-55.

⁷¹ From the homepage of the Danish Society for Clinical Oncology www.dsko.org

The Cancer Centre That Never Was

the only institutes entirely dedicated to cancer research have historically been on private hands; the research units of the Danish Cancer Society.

However, this does not mean that cancer research was not done at the universities or at other State-owned research institutes such as hospitals and veterinarian schools. Here a broad spectrum of research activities commonly known as cancer research was performed at different laboratories and in different contexts. Cancer research – be that clinical, basic, or epidemiological – addresses so many different aspect of the biology, treatment and/or aetiology of cancer diseases that the practitioners of cancer research in all its forms practically are not working within the same cognitive framework or employing the same well-defined methods or instruments⁷². The vague terms “oncology” and “cancer research” are thus common denominators for a wide array of clinical, basic, and epidemiological research activities with a strong or even a marginal relevance to the cancer problem, conducted at institutes that most often are not devoted entirely to the study of cancer. The fact that the term “cancer research” does not do justice to the heterogenic field it designates is not surprising, as the umbrella-like word “cancer” is not quite suitable either. As James T. Patterson notes, the word “cancer” seems to indicate that one is talking about a single, easily defined disease, although scientists have enumerated over 200 different varieties of cancer with each its own natural history⁷³. Still, this diversity of illnesses has one thing in common. They are caused by cells that are dividing uncontrollably and can be capable of invading other parts of the body, causing malfunction and destruction of vital body organs⁷⁴. Perhaps this is why many of the doctors, scientists and laymen presented in the case of this thesis tend to describe the various diseases and the heterogenic research done to understand them with the words “cancer” and “cancer research”. Like Patterson, this thesis does the same although it too holds the more accurate medical distinctions and disciplinary affiliations in great respect⁷⁵.

While laymen typically use the general words for convenience or in lack of a more precise professional terminology, the reason why the professionals use them is more interesting. It is

⁷² For further information on the different theories on cancer that from an early point gave rise to the heterogeneity of the field, see chapter 2.

⁷³ Patterson, J. T. (1987). The Dread Disease: Cancer and Modern American Culture. Cambridge, Harvard University Press, p. 5 (or x) of the preface.

⁷⁴ Breslow, L., D. Wilner, et al. (1977). A History of Cancer Control in the United States, with Emphasis on the Period 1946-1971. Bethesda, Division for Cancer Control and Rehabilitation, National Cancer Institute, vol. 1, p. 74.

⁷⁵ Patterson, J. T. (1987). The Dread Disease: Cancer and Modern American Culture. Cambridge, Harvard University Press, p. 5 (or x) of the preface.

The Cancer Centre That Never Was

possible that they, too, use the terms for convenience even in official reports that are not targeted at lay readers, but it is also possible that the physicians and scientists working on different aspects of cancer – equally simplistically termed “cancer researchers” although their educational backgrounds, research projects and disciplinary affiliations vary greatly to the extent that they can no longer be said to study the same disease or aspect of it – are using the general term to form a common front and legitimise their research field to their peers and the funding organs in order to build institutes/organisations; be that university departments or cancer centres⁷⁶.

It will be evident that the actors of the story of *the cancer centre that never was* also had very different notions or definitions of what in fact the proposed cancer *centre* was – or should be – in terms of what types of cancer research and clinical activities should be included and how the centre should be managed, and this impeded the efforts to establish it. Based on the literature on cancer research, it seems that the term “cancer centre” has many different meanings for different people in different national settings.

The umbrella-like nature of the concepts “cancer”, “cancer research”, “cancer centre” and “oncology” and the lack of cancer departments/scientific disciplines and separate medical specialities at the Danish universities and hospital bears witness to the difficulties one would encounter, if one set out to build a cancer centre. It would require a combination of the institutional matrices of a wide range of actors from different medical and science worlds. And in particular, the physical establishment of a cancer centre – a structural entity in the medical and scientific world – could be seen as an attempt to bypass the Danish medical community’s traditional speciality system which is respected by the medical world. Consensus on the content of such a centre would be very difficult to find amongst the possible inhabitants of the centre, but even if this were possible, the centre would in itself signal a professional demarcation to other scientific disciplines and professional specialities that might be perceived by those as a threat.

In summation, Patterson notes the vagueness of the term “cancer”, and consequently “cancer research”, but he decides to talk about the attitudes toward “cancer” in this singular anyway. Likewise, this thesis will sometimes use the unspecified term “cancer centre” because this is

⁷⁶ Early molecular biologists insisted on using the term to describe the work of the earliest research schools in the US and the UK, although their methods, objects, tools and models differed quite a lot. Nielsen, A. K. and M. L. Thomsen (2006b). “I det biokemiske og molekylærbiologiske spændingsfelt”. *Viden uden grænser 1920-1970*. H. Nielsen and K. H. Nielsen. Aarhus, Aarhus Universitetsforlag: 165-182, p. 194.

how the actors of the study refer to the centres in question, although they differ in type and content, as this is a central point of the story. It would seem that the actors use simplistic and unspecified terms such as “cancer research” and “cancer centre” to signal a unified front against cancer – especially in times with poor public funding of the research institutes from which the actors come.

1.4 What has already been done, and what is to be done: related literature on theory and topic

This historical thesis benefits from, contributes to, and distinguishes itself from a wide selection of theoretical literature and topically related case studies using this theory. Much of this literature has served as inspiration to this thesis, while some of it could not be used despite related topics and area of use but has helped demarcate the thesis from the existing body of literature. This has to be accounted for which is the purpose of the following sections.

There are no historical works on Danish cancer research in the timespan of the case study. Aside from a short paragraph in a 1994 exam paper from Copenhagen Business School, “Kræftens Bekæmpelse – en humanitær organisation i modvind” (“The Cancer Society – a humanitarian organisation in headwind”) by Søren Lecker and Andreas Kjær, no specific works have been published that address the plans to establish a cancer centre in Copenhagen⁷⁷. There are, however, thorough works on the history of the Danish health care sector which have been used much in this thesis to describe the development and organisation of e.g. the Danish hospital system, the funding of health services and medical research, political discussions on the growing costs for the health care system, statistical data etc.: Kurt Jacobsen and Klaus Larsen (2007): “*Ve og velfærd*”, and to a lesser extent Signild Vallgård (1992) “*Sygehuse og Sygehuspolitik i Danmark*”.

With respect to the central institutional analysis of this thesis, there has been much literature to choose from. As the “notion of institutions itself is not yet a coherent concept, at least not across the various users of the term”⁷⁸ the institutional analyst faces the risk of having to juggle incompatible theoretical works in order to “cover the ground”, so to speak. To avoid this pitfall, the present thesis draws on two main theorists in combination – Douglass C. North and Pierre Bourdieu for reasons described in section 1.2. In addition, the thesis has found inspiration

⁷⁷ Lecker, S. and A. Kjær (1994). Kræftens Bekæmpelse - en organisation i modvind. Institut for Organisation og Arbejdssociologi, Copenhagen Business School: 116.

⁷⁸ Nelson, R. R. and B. N. Sampat "Making sense of institutions as a factor shaping economic performance." Journal of Economic Behavior and Organisation **44**: 31-54, p. 32.

The Cancer Centre That Never Was

on the use of North's concept of path dependence in Kurt Jacobsen's historical portrayals of the development of the Danish telecom system in two different writings: Kurt Jacobsen (2005) "*Institutional change and path dependence in Danish telecom development*" (paper presented at the Cross-Connection Conference at Science Museum London, November 2005) and Kurt Jacobsen (2004) "*Jydsk Telefon – verdens bedste telefonselskab*".

Although none has touched on the topic of path dependence in the organisation of cancer research, several international studies on how cancer research and/or treatment has been organised in other countries have served as some inspiration as well. Because of both topical and methodological differences between these works and the present thesis, they have only been used sparsely, and any reference to them will therefore be relatively crude as it will be comparisons to e.g. successful establishments rather than failed ones, or to different countries at different periods of time (e.g. France in the interwar years, in the UK at the turn of the 19th century, and in the US after the National Cancer Act 1971). Nevertheless, this thesis pertains (in part) to the discussions of the plans to establish a scientific and clinical centre (or *institute* as some prefer)⁷⁹ – a cancer centre – which was to be an important element of organising⁸⁰ Danish cancer research in 1949-1992. As such, the thesis touches upon the well-known theoretical field in the history of science and medicine – institutionalisation⁸¹ – which deserves special mentioning in the following.

Factors that drive the emergence of new centres and define an institutionalised research area have been subject to very extensive literature ranging from histories of specific institutes to histories of the process of institutionalisation which describes how research fields are established – be that in the form of departments, centres, disciplines, professional societies, journals etc. Especially the literature on specific institutes or centres is very comprehensive, as such histories are popular with both professional historians of science and researchers writing jubilee publications of their own departments, universities etc. Amongst the histories of specific

⁷⁹ I define a scientific institute as an organisational unit with an independent administration and economy: e.g. a university department or a private research laboratory. Nielsen, H., K. H. Nielsen, et al. (2006). "Videnproduktion som komplekst socialt system". *Viden uden grænser 1920-1970*. H. Nielsen and K. H. Nielsen. Aarhus, Aarhus Universitetsforlag, p. 502.

⁸⁰ Following Kohler's introduction to his *Partners In Science: Foundations and Natural Scientists 1900-1945* (1991), I define this form of organisation as anything that has to do with structuring the scientific world – e.g. the formation of scientific disciplines, the building of research institutions, research management, social networking, communication systems, and political fiscal negotiations etc.

⁸¹ In this section, the word institutionalization refers to the process by which new scientific disciplines, organizations, journals etc. emerge, and should not be confused with North's concept of "institutes" which is described in the above. The concept has a very different meaning than North's, as it is used by different authors (Kohler, Lenoir and Lundgren) in a completely different context and discipline.

The Cancer Centre That Never Was

cancer establishments are historian Joan Austoker's *A History of the Imperial Cancer Research Fund 1902-1986* (1988), Triolo's and Shimkin's *"The American Cancer Society and Cancer Research – Origins and Organization: 1913-1943"* (1969), and sociologist Patrice Pinell's *The Fight Against Cancer: France 1890-1940* (2002). Topically, these works are classics within the history of cancer; with each their theoretical take on the concept of institutionalisation.

The issue of what creates a scientific discipline has been subject to a wealth of national and international literature, as scientific disciplines⁸² and the associated institutes are not entirely uniform entities, and the factors and circumstances connected with their emergence can vary from discipline to discipline and from country to country, as will be elaborated on below. Some of the many historians who have worked on this process within the academia are Robert Kohler, Timothy Lenoir, and Anders Lundgren⁸³. They have described the special circumstances connected with what they call "institutionalisation"⁸⁴ – the process of forming scientific disciplines. Such circumstances range from the personal power of individuals to influence the decision making at the department or centre housing the upcoming discipline, to more general political and financial factors such as the organisational structures at the institute, the amount and state of similar and already existing disciplines/institutes, and the government's/parliament's attitude towards the role of science in society⁸⁵. The works of

⁸²Following Nielsen et. al, I define a scientific discipline as an institutionalised research area with a specific cognitive content, use of specific instruments, and more or less well-defined methods agreed upon by its practitioners, see Nielsen, H., K. H. Nielsen, et al. (2006). "Videnproduktion som komplekst socialt system". *Viden uden grænser 1920-1970*. H. Nielsen and K. H. Nielsen. Aarhus, Aarhus Universitetsforlag, p. 502.

⁸³ Lundgren, A. (1999). "Naturvetenskapelig institutionalisering". *Vetenskapsbärande: naturvetenskapen i det svenska samhället 1880-1950*. S. Widmalm. Hedemora, Gidlunds Forlag; Kohler, R. (1982). *From medical chemistry to biochemistry*, Cambridge University Press, Kohler, R. (1991). *Partners in Science - Foundations and Natural Scientists 1900-1945*. Chicago, The University of Chicago Press; Lenoir, T. (1997). *Instituting Science: The Cultural Production of Scientific Disciplines*. Stanford, Stanford University Press.

⁸⁴ Again, the term applied by Kohler, Lundgren and Lenoir is not to be confused with North's concept of "institutes".

⁸⁵ Anders Lundgren describes the formation of biochemistry as a new discipline at the Swedish universities as a process of "inner" institutionalisation through which researchers started to work on a neglected sub-area within an already well-established discipline. When the new sub-area grew so big and successful that its practitioners wished to distinguish their field from its "mother" discipline, it experienced a process of "outer" institutionalisation during which it eventually received a separate name, budget, and student clientele at the Swedish faculties (Lundgren (1999), p.130). In other words, Lundgren perceives institutionalisation as a process where new disciplines "bud" of other disciplines from which they have got their methods and cognitive frames. Lenoir takes things a little further as he argues that the expanding sub-area of a discipline cannot expect to be institutionalised as an autonomous discipline based on a successful research program alone. According to Lenoir, the final or "outer" institutionalisation depends on a series of factors besides a viable and successful research program and a loyal clientele of researchers; it also depends on e.g. favourable power relationships at the institute in question, the political goodwill in general, and the ability of the new discipline to be indispensable at the institute by delivering research services to its other disciplines (Lenoir (1997), pp. 58-61).

Robert Kohler thinks along these lines and stresses the importance of the political and diplomatic footwork which the researchers have to do in order to institutionalise their research area or to build scientific institutes. Kohler

The Cancer Centre That Never Was

Lenoir, Kohler, and Lundgren have served as inspiration for many historians of science, and some of the factors that these authors highlight as important in their work – such as political goodwill, a loyal clientele, and favourable local power-relations – are relevant to this thesis as well. However, it is important to note that while their works describe the factors needed for successful institutionalisation, this thesis focuses on the demise of a strangely persistent idea/path or perhaps the situation when institutionalisation never happens – one could call it *non-institutionalisation* – and for this reason the present thesis cannot adopt the full theoretical framework produced by these authors.

Although there is no theoretical literature on non-institutionalisation per se, several writers have employed a socio-historical approach to identifying the factors explaining the delayed emergence of new professions, disciplines or welfare policies. One of these writers is historian Lindsay Granshaw. In her work, she describes how the medical specialists of the 19th century Britain employed strategies to improve their positions in the medical profession⁸⁶. General practitioners tended to regard the self-proclaimed medical specialists as nothing more than quacks and thus assigned them a very low position in the professional hierarchy of the medical field. However, by World War I, the specialists were among the leaders of the profession, and Granshaw claims that part of the explanation for this change is to be found in the fact that the 19th century specialists had a hard time finding positions at the general hospitals and therefore established their own specialist hospitals as a route to power, prestige and wealth, as the specialists did not have a hard time finding paying patients. In other words, the specialists employed a strategy of building an institute and stepped into fame and fortune by means of bricks and mortar⁸⁷. Inasmuch as she deals with a professional group's employment of strategies

compares the scientific disciplines with geographical nations which establish and defend their borders through dynamic interaction with each other. Only, the borders established and defended by researchers are not geographical, they are cognitive and institutional, and the researchers are fighting to create disciplines and institutes that will accommodate their personal work: "*Disciplines are political institutions that demarcate areas of academic territory, allocate the privileges and responsibilities of expertise, and structure claims or resources. They are the infrastructure of science (...).*" and "*If disciplines are to the political economy of science what nations are to political economy of production and commerce, then it is no surprise that their domestic affairs may be profoundly influenced by a diverse traffic in ideas and problems with neighbouring disciplines*" (Kohler (1982), p. 1&7). Kohler and Lenoir in particular make an important point about the social, diplomatic and political work and power struggles that are often involved in the process. In the words of Lenoir: "*But absolutely crucial to understanding the dynamics of discipline formation and institution building is realizing that no field, no matter how autonomous it appears, is completely closed to external factors. Indeed "external" factors provide crucial leverage points in the dynamics of the field*". (Lenoir (1997), p. 17).

⁸⁶ Granshaw, L. (1989). "Fame and fortune by means of bricks and mortar: the medical profession and specialist hospitals in Britain 1800-1948." *The Hospital in History*. L. Granshaw and R. Porter. New York, Routledge: 199-220, pp. 199-220.

⁸⁷ Ibid., p. 199.

The Cancer Centre That Never Was

to secure their position in a field, her work seems inspired by Bourdieu's abovementioned theories.

Other historical works, by sociologist Patrice Pinell, are also inspired by Bourdieu and explore the historical conditions that can slow down or prevent the process of institutionalisation. Pinell provides a socio-historical analysis of the first French developments in the fight against cancer in the interwar years. In particular, Pinell describes the process that got the French State involved in the fight against cancer. According to Pinell, the process can be explained by the strategies and interests of several groups as well as historically specific conditions that paved the way for the French anti-cancer efforts. In essence, Pinell argues that World War I and the efforts of first French anti-cancer organisation to set up an image of cancer as a scourge resulted in the State producing an anti-cancer policy after World War I⁸⁸. Before World War I, cancer had not been considered the most serious health threat in society by the State which was committed to the fight against the great infectious diseases of the time⁸⁹. However, as the mortality rates due to this type of diseases decreased and when the country's anti-cancer organisations managed to depict cancer as a greater peril inflicting not only those living in poverty but all layers of society, threatening rich and poor alike and being a universal disease found in man, animal, and plants, the situation changed.

According to Pinell, this universal trait interested the researchers and the combination of the disease's image as a scourge, its vistas of new exciting research lines, and the special French wartime mobilisation of medical experts in cross-disciplinary teams and temporary teaching institutes persuaded the French government to formulate an anti-cancer policy in the form of a network of cross-disciplinary treatment and training centres or "healing factories"⁹⁰ modelled after the wartime mobilisation of medicine⁹¹. The idea was to decentralise treatment by placing specialist centres providing standardised treatment around the country in order to protect the French people against the cancer peril, but not all cities wanting to host such a centre were given one despite the local demands for it, and this resulted in the establishment of unofficial centres outside the government program.

Pinell thus sets out to show how the interpenetration of the strategies of the different groups of actors diverted the project of setting up a network of anti-cancer treatment centres from its initial

⁸⁸ Pinell, P. (2002). *The Fight against Cancer: France 1890-1940*. London, Routledge, p. 183, p. 191.

⁸⁹ Ibid., p. 182.

⁹⁰ Ibid. p. 191.

⁹¹ Ibid. p. 75.

The Cancer Centre That Never Was

objective and resulted in both “an uncontrolled development of care institutions and in a disparity in their equipment potentialities”⁹². In order to identify the causes of the abovementioned development, Pinell has found it necessary to identify the groups involved in the case and the questions they asked themselves about it, to define their interests, and to show the relationships which they had with each other and their areas of agreement and conflict⁹³. In doing so, Pinell’s case study also illustrates Lenoir’s notion that successful institutionalisation depends in part on political goodwill. But according to Pinell, the interests of the various agents, groups and institutes, their alliances and oppositions, their strategies, and the interpenetration of their strategies are neither similar, nor in principle transferable from one country to another⁹⁴. And this makes the national study of the particular *Danish* efforts to establish a cancer centre justified. And as will be evident in the following chapters, the plans for a Danish centre did not receive the same amount of political goodwill as the French centres did.

A long list of other writers have dealt with institutionalisation within the cancer community in different countries, and these works have served as inspiration to the present thesis. Although none of them mirrors this thesis in both topic and methodological approach, they need mentioning here:

- *Caroline C.S. Murphy* has written specifically on the establishment of cancer hospitals in Britain and on how the discovery of e.g. Radium, X-rays, better surgical methods, and a burgeoning philanthropic interest in experimental cancer research made the management of these hospitals give up their initial plans of establishing hospices for the terminally ill cancer patients, and instead establish research laboratories in order to better attract funding – thereby creating forerunners of the 20th century’s cancer centres in Britain⁹⁵. Murphy’s work has thus serves as inspiration on how the nature of a cancer centre changes in history in accord with the progression of cancer research and/or treatment.

⁹² Pinell, P. (1991). "Cancer Policy and the Health System in France: "Big Medicine" Challenges the Conception and Organization of Medical Practice." *Social History of Science* 4(1): 75-101, p. 75.

⁹³ Pinell, P. (2002). *The Fight against Cancer: France 1890-1940*. London, Routledge, p. xv-xvi.

⁹⁴ Ibid.

⁹⁵ Murphy, C. C. S. (1989). "From Friedenheim to Hospice: A century of cancer hospitals". *The Hospital in History*. L. Granshaw and R. Porter. New York, Routledge: 221-241

The Cancer Centre That Never Was

- *David Cantor's* work on the MRC's support for experimental radiology during the inter-war years in Britain has been an inspiration as well⁹⁶. In this work, Cantor describes the Medical Research Committee/Council's (MRC) attempts to popularise radium therapy and experimental radiology in the interwar years, and he describes how specialised cancer centres were planned to make medical practitioners, clinical scientists, and laboratory scientists collaborate and how the MRC employed different strategies to fend off medical practitioners' control of the medical research field.
- *Charles R. Hayter* has written an interesting article and a book on the establishment of Ontario's cancer program 1929-34⁹⁷. Here, he deals with the question of how the organisation of Canadian cancer treatment became a struggle between two groups of physicians who saw the government's efforts of centralisation either as a benefit for or a threat to their professional work and status, and as such the present thesis parallels his work.
- *Joan Austoker's* historical work on British basic cancer research and its largest cancer research organisation, *A History of the Imperial Cancer Research Fund 1902-1986*, illustrates many similarities and differences in the way cancer research was organised and financed in Denmark and Britain, and it is a historical work on "positive" institutionalisation of a cancer establishment. Also, it describes the disagreement on the role of basic science in cancer research between the Imperial Cancer Research Fund and the college of surgeons, under the aegis of which the Fund was, and how this discrepancy between professional groups affected the development of the Fund's research program.
- *Richard E. Rettig's Cancer Crusade* and *Erdey's Armor of Patience: The National Cancer Institute and The Development of Medical Research Policy In the United States* describe the earliest anti-cancer efforts and organisations, and the establishment of the National Cancer Institution in 1937. They also analyse the privately initiated lobbyism that led to the emergence of the National Cancer Program in the US in 1971 and the

⁹⁶ Cantor, D. (1989). "The MRC's Support for Experimental Radiology during Inter-war Years". Historical Perspectives on the Role of the MRC: Essays in the History of the Medical Research Council of the United Kingdom and Its Predecessor, the Medical Research Committee, 1913-1953. J. Austoker and L. Bryder. Oxford, Oxford University Press: 181-204.

⁹⁷ Hayter, C. R. (1997). "Medicalizing Malignancy: The Uneasy Origins of Ontario's Cancer Program, 1929-1934." Canadian Bulletin of Medical History **14**: 195-213.

Hayter, C. R. (2005). An Element of Hope: Radium and the Response to Cancer in Canada. Montreal, McGill-Queen's University Press.

enduring expansion of the federal government into the field of medical research on cancer.

1.5 The case study in short: structure and central actors

All of these studies have contributed to a more nuanced understanding of the international developments within the cancer field, and they have helped place the Danish developments and problems in the cancer field in an international context. But even though the present thesis on *the cancer centre that never was* parallels these works topically inasmuch as they deal with developments within cancer communities, it is important to point out that these works described institutes that were actually established, and this thesis will describe why a cancer centre was never built. And it will use a path dependence perspective to explore an otherwise irrational development. This has not been done in the abovementioned histories or in any other history of cancer centres.

It is the working hypothesis that the concept of path dependence is relevant to the case study of this thesis, but in the end it will have to be tested. Is it possible to use such a perspective to explain a historical development? In order to explore whether or not the story of *the cancer centre that never was* can in fact be characterised as a matter of path dependence, the thesis will focus on four key events that are crucial to the understanding of the story as a matter of path dependence:

1. Path creation.
2. Path re-actualisation/lock-in.
3. Path perpetuation.
4. Path dissolution.

Path creation: The establishment of the Fibiger Laboratory in 1949

In 1949, the Danish Minister of Education Hartvig Frisch inaugurated Denmark's first ever cancer research laboratory, The Fibiger Laboratory, as a joint venture between the Danish government and the private cancer charity The Danish Cancer Society. The new laboratory was established on the initiative of the cancer charity which up until this point had been the main source of financial support for cancer treatment as well as cancer research which at the time was not an autonomous research discipline at the Danish universities, and therefore was not supported through the State Budget.

The Cancer Centre That Never Was

The private Cancer Society had not, however, at any point had unlimited financial means to support an appropriate physical structuring of the rather randomly organised cancer research activities in the country. Activities which the Cancer Society believed to be an essential part of the fight against cancer. For a long time, the private Cancer Society had therefore wished to organise the field in the best possible manner in order to strengthen it, and had continuously been lobbying to engage the State in the cause. Four years prior to the inauguration of the Fibiger Laboratory, a Danish pathologist from the University of Copenhagen had presented his vision of the most optimal organisation of Danish cancer research and treatment to the Danish Cancer Society and the Danish politicians. Professor Julius Engelbreth-Holm had then just returned from a stay at the large and private cancer institutes in the US, where he was inspired by the way the American anti-cancer efforts were often organised in large and centralised cancer hospitals with affiliated research laboratories, and he hoped that a similar venture in Denmark could help improve the quality and distribution of the Danish cancer services⁹⁸ by recognizing the importance of cancer *research* to continuously improved cancer *treatment*⁹⁹. Research had not traditionally been at the core of these services. He thus imported the early American concept of the wide-ranging “cancer centre”¹⁰⁰ – uniting research and treatment under the same roof to bridge the gap between bench and bedside – and proposed that it be financed through public and private funds and placed on the premises of a university hospital and under academic management.

The Cancer Society supported the idea of a public-private comprehensive centre, and following extensive negotiations with the State, an unprecedented partnership was established between the cancer charity and the State when the Fibiger Laboratory emerged as a joint venture in 1949. The laboratory was situated within the University of Copenhagen and established for State funding while the costs of running the laboratory were to be shared fifty-fifty by the Cancer Society and the State. At the inauguration, the Minister of Education stated that this type of

⁹⁸ Here I define cancer services as the cancer treatments offered to cancer patients.

⁹⁹ Engelbreth-Holm, J. (1946) "Kræftforskningen i Fremtiden" Berlingske Aftenavis København 11.01.1946

¹⁰⁰ On the nature of early American cancer centres, see:

Cantor, D. (1993). "Cancer". Companion Encyclopedia of the History of Medicine. W. F. Bynum and R. Porter. London, Routledge: 537-61 & Cantor, D. (2007). "Introduction: Cancer Control and Prevention in the Twentieth Century." Bulletin of the History of Medicine **81**: 1-38. Cantor gives an overview of the first cancer establishments. Shingleton, W. W. (1989). "Cancer Centers- Origins and Purpose." Archives of Surgery **124**: 43-45, who discusses the origin and definition of “cancer centres” in many countries including the US. Vaeth, J. M. (1975). "The network concept in the cancer center." The American Journal of Roentgenology Radium Therapy and Nuclear Medicine **123**(1): 3-6, who discusses the concept of cancer centres (and the collaboration therein) as part of the National Cancer Program of 1971.

The Cancer Centre That Never Was

unprecedented arrangement would henceforth be a good way to get the State to contribute to the advancement of science. So even though the laboratory was not – as of yet – placed in close connection with a cancer clinic (as a comprehensive cancer centre was supposed to be), and even though the State would eventually go back on its word to finance half of the running costs of the Laboratory, the State formally sanctioned the idea of a public-private comprehensive cancer centre that day.

By engaging itself for the first time ever in the establishment and operation of a public-private (cancer) centre, the State created the formal institutions¹⁰¹ (and the specific interdependent relationship between those institutions and organizations) that shaped the path that dictated the direction for the next 40 years' discussion of the organisation of cancer research. The idea, however, proved very difficult to put into practice for a variety of reasons that will be identified throughout the following chapters of this thesis. Nevertheless, the idea of a Danish cancer centre proved remarkably persistent, and cancer researchers and administrators at the country's different research institutes, hospitals, cancer fighting organisations and funding bodies chased the idea for several decades in the hope that it could be the ideal organisational tool to strengthen their field. In some instances this was done without stopping to question the merits of the idea itself even in the face of alternatives already proving their merits.

Path re-actualisation and lock-in: The writing and publishing of the Kjeldgaard Report in 1979-84

From 1979-1981, a subcommittee of the Danish Natural Science Research Council and the Danish Medical Research Council analysed the state of Danish cancer research in order to make recommendations to the Danish Government on ways to strengthen the field¹⁰². Of course, such a commission implied that the existing state of Danish cancer research (and treatment) was not necessarily optimal, that the existing organisational tools were not necessarily effective, and that new ones had to be explored. Even so, when the subcommittee presented its recommendations to the Government in 1981, it proposed regression rather than innovation by revisiting the idea of establishing a comprehensive cancer centre. An idea, that had not been possible to effectuate before and which was interestingly enough not even supported by the statistical material of the

¹⁰¹ The political decision to support a cancer centre that would otherwise not have been established for the scarce private funds available.

¹⁰² Forskningsråd, U. f. b. c. n. a. S. n. (1981). Cancerforskning i Danmark, SNF.

The Cancer Centre That Never Was

conducted analysis¹⁰³. So while the idea seemed to mirror the authors' personal preferences rather than actual statistical evidence, it was strongly accentuated throughout the 1980's in the form of plans for a centre in the Rockefeller research milieu in Copenhagen.

The report's recommendation of using the well-known idea of a public-private comprehensive cancer centre as the tool to strengthen Danish cancer research was not the result of increasing returns or positive feedback. It was rather the result of informal institutions which influenced the organisations to make choices that in turn perpetuated the path. The centre became a tool to change formal institutions towards making cancer research a priority of the State (which it was not) in times of financial recession and governmental policy of non-growth of public expenditures.

Path Perpetuation: The Rockefeller centre and the growth of the Danish Cancer Society 1984-1987

While the government approved the planning of a cancer centre in the Rockefeller building it did so on the condition that the establishment would not require additional state-funding. Despite the fact that the "centre" thus no longer seemed able to bring about the coveted state financial prioritizing of the cancer research field, the planning for a public-private centre carried on.

But in the midst of the planning for a cancer centre, one of the strongest proponents of the idea had a change of heart. The private Danish Cancer Society enjoyed a massive economic growth due to skillfull management and economic strategies that allowed the cancer charity to utilize the institutional matrix to its own advantage giving it moral and financial leverage and power in the cancer community. In order to pursue further growth or just maintain status quo, the Society was faced with the necessity to defect from the plans to build a public-private cancer centre as proposed in the Rockefeller plans. And it had to do so without suffering damaging PR in the public eye (third party enforcement) as it was heavily dependent on voluntary contributions from the public. So although the Society decided that a centre in its current form was in fact a threat to the organisation's strategic goals, the cancer charity deliberately perpetuated the idea of it (with a markedly different and inferior content) by serving the informal institutions with a new

¹⁰³ Henningsen, I. (1982). "Flere spørgsmål end svar." Naturkampen: 20-23, p. 23.

The Cancer Centre That Never Was

centre plan so that the organisation would not suffer from the decreasing income and negative societal feedback that would result from pulling out of the centre plans altogether. The charity proposed that a different type of centre be established (The Finsen Centre) on terms that were in accordance with the organisation's growth strategy which remained undisclosed to the other negotiation partners.

Path dissolution: The fall of the Finsen centre plans 1987-1992

The idea was finally abandoned in 1992 when a large number of the country's cancer researchers and clinicians voiced their doubts about its validity from a cost/benefit perspective. In the wake of the abandoned Rockefeller plans, the Danish Cancer Society offered to establish a cancer research centre, if the state would sell the soon to be vacant Finsen hospital premises to the charity. A centre could be established there, although it would no longer entail a contact between bench research and patient care. The Society's ambition of continuing its investment strategy, which utilized the institutional matrix to secure continued growth in income and serving of the anti-cancer cause in times of economic instability, depended heavily on a purchase of the state-owned Finsen campus at which the Society already owned one building.

An attempt to secure the lot at a cheaper price by using moral arguments to force the State to sell via an exemption clause that allowed for special sales term for bidders with "worthy causes" at first sight seemed to secure the Society a better price, but proved to be a costly affair that linked the sale with a moral responsibility of establishing a privately financed cancer centre under great public influence. And the linkage would make the Society vulnerable to moral scrutiny by any critics appealing to the public as moral third party enforcers in the non-contractual matter of establishing a cancer centre. In this way, a change of taste and preferences (informal institutions) undermined the power of the Society in the cancer community and this was utilized by a small group of critics seeking influence on the private cancer charity's practices. The debates and criticism focused on the form (management and financing) of the centre – because these were the means to secure influence – rather than on what was originally the primary objective: a scientific program coordinating the Copenhagen cancer research.

At a grand debate meeting for cancer researchers and -clinicians held in January 1992, the matter of content was finally discussed, and a majority of cancer researchers and clinicians found the Finsen plan to be too different and scientifically inferior, compared with the original

The Cancer Centre That Never Was

plans from the Kjeldgaard Report and the Rockefeller Centre, to be able to meet the objective of strengthening cancer research in Copenhagen, the nature of which had changed gradually along with new scientific progress in cancer research. The meeting revealed that the more than 40 year old idea of a comprehensive public-private cancer centre might no longer fit the needs of the Danish cancer research groups in the 1990's. A change in relative prices (the new oncogene paradigm), taste and preferences (due to improved current housing facilities for the researchers and clinicians) changed the institutional matrix. The path dissolved.

1.6 Sources

This thesis is mainly based on primary written, unpublished sources. Most of them have been found in the extensive archives of the Danish Cancer Society. The minutes from meetings held within this organisation's three main organs – the Head Board, the Executive Committee and the Scientific Council – contain elaborate discussions of the society's scientific objectives, policy, regulations, structure, construction plans, and financial situation. In addition, the annual reports of the organisation have contributed much information as well. Reports on the plans to establish a comprehensive cancer centre and personal correspondence have been collected from several of the central actors of my case study.

While there were many sources to be found about the Society and its involvement in the failed centre plans, the same cannot be said about the State's research councils. It has proved very difficult to form a general view of the archives of these public organs. Due to a move of the secretariat, no administrative personnel were certain about the location of the necessary material, and they could thus not grant access. However, head clerk Bente Møller noted that there was nothing of interest to this thesis in the archives anyway. There would be no principal discussions in the archives of the establishment of a cancer centre that never came into existence. Even the annals of these public organs reveal nothing of remote relevance to this thesis. The only written material on the research councils' involvement in cancer research is to be found in the published reports *Cancerforskning i Danmark* (1981) from the State's scientific research council, *Sundhed og sygdom: en strategiplan fra Statens Lægevidenskabelige Forskningsråd* (1988) from the State's medical research council and the unpublished *Redegørelse til Undervisningsministeriet vedrørende en samordning af den basale onkologiske forskning i hovedstadsområdet* (1984) from the collaborating institutes involved in the planning

The Cancer Centre That Never Was

of the cancer centres¹⁰⁴. Apart from these reports and several newspaper articles, it has not been possible to find any further material about the government's and its research councils' role and commitment in the case. This is very unfortunate, but nothing indicates that a vast amount of important documents has been missed, though. According to Bente Møller and several former members of the State's research councils there simply is nothing more to find, because the centre plans were never put into practice and therefore were not further processed or documented. However, adequate material about the failed centre plans has been found in other archives and through newspaper articles from the database Infomedia.dk¹⁰⁵. Also, this thesis has drawn from a transcribed recording of a meeting which debated one of the failed Danish cancer centres at which more than 250 cancer researchers were present and allowed to present their opinion on the centre plans. As a condensate of the meetings discussions, this has been a very useful tool as it reflects how the researchers regarded the cancer centre at the time and not how they see it in retrospect, as is the case with interviews done many years after the actual historical events in question.

¹⁰⁴ The translated titles of these reports are: "Cancer Research in Denmark", "Health and Disease: Strategies of the Medical Research Council", and "Report to the Ministry of Education on the Coordination of Basic Cancer Research in the Copenhagen Area".

¹⁰⁵ The newspaper articles retrieved through this database and the database bibliotek.dk often come without page-numbers, and this is the reason why some of the newspaper articles used as references in the following chapters do not have a specified page numbers. However, all articles can be easily found in the databases using the data on authors, titles, newspaper, and/or date specified in each case. The articles has been retrieved through several searches with different keywords alone or in combination (e.g. "cancer centre", "The Cancer Society", "Finsen", "Rockefeller", "cancer research") in the period from 1940-2005, in order to check if the searches resulted in the same or separate groups of articles until no new articles would appear in the searches.

The Cancer Centre That Never Was

Archives	Location	Status
The Danish Cancer Society	The Danish Cancer Society, Copenhagen	Researched
The State Research Council Archives	The Danish Research Agency, Copenhagen	No admission due to lack of relevant material
Private archives - Ole Bang	Private property, Copenhagen	Researched
Private archives – Keld Danø	Private property	Researched
Private archives – Jes Forchhammer	Private property, Bagsværd	Researched
Private archives- Niels Ole Kjeldgaard	Private property, Aarhus	Researched
Infomedia	Online newspaper database	Researched

In addition to this, a lot of secondary sources have been used in the form of books and articles about e.g. the early history of some of the organisations mentioned in this thesis. In a few cases, these sources are written by non-historians – e.g. physicians writing a short history of their organisation without always finding primary sources to document their arguments – and they have thus primarily been used for factual information on organisations. In two instances, actors of the cancer field have published their personal recollections of their work in the Cancer Society, and another has published his account of the events in a revised history of one of the Danish cancer research institutes¹⁰⁶. Although these sources are eyewitness accounts of the period of time involved in this thesis, they were written several years after this period and tend to be argumentative and will not be given equal status as the correspondence and proceedings found in the archives. As such, they are still useful to this study, but will be treated the same way as conducted interviews, see below.

The social sciences have been quick to embrace the use of interviews/oral documents in their studies. The same cannot be said about the history of science and traditional archival science

¹⁰⁶ Bang, O. (2004). *En personlig beretning om Kræftens Bekæmpelse 1981-1994*, Narayana Press (personal recollections of his employment in the Cancer Society), Amdrup, E. (1998). *Som jeg så det - en kirurgs tilbageblik*. Danmark, Gyldendal (personal recollections of his career as a physician and his administrative work at the Cancer Society), and Kieler, J. (1989). *The Fibiger Institute 1949-1989*. Copenhagen, The Danish Cancer Society (his jubilee publication at the Fibiger Institute 50th anniversary).

which seem more reluctant to accept the use of interviews as legitimate historiographical tools. The reasons for this are manifold. Above all, traditional positivist historiography does not attribute the same status to interviews as to written documents which are considered more reliable and “authentic”¹⁰⁷. Interviews are produced with the sole purpose of informing posterity of a series of events, and some historians thus consider them too subjective – mere opinions – that cannot form the basis of sound history writing. The interviewees may have personal agendas and good reasons for altering a chain of events and give false information to make themselves or others look better or worse. Also, as interviews are often conducted a long time after the historical events in question, their “reliability is at the mercy of memory”¹⁰⁸. Older interviewees in particular tend to have difficulties remembering dates and the chronological order of specific events.

Indeed, interviews are seldom accurate accounts of *wie es eigentlich gewesen*. But one could say the same about most other historical sources. A historian of science would have to exert the same critical assessment of his or her sources, whether written or oral. The fact that something is written and found in an archive does not necessarily give it more authority and authenticity than an oral document. The producer of a written document can be just as partial and subjective as the interviewee. Nevertheless, some written documents are produced closer to the events in question than oral interviews conducted several years later. In this way, they are more authentic than the personal account of the interviewee who tends to forget details with time. Still, this thesis uses oral documents as historical sources (although secondary), as they offer advantages that supplement the archival materials very well. The written documents do not always reveal what is written between the lines, whereas interviews (and especially the ones on videotape) manifest the emotions and intentions of the interviewees¹⁰⁹.

The interviews can provide new knowledge about decision-making processes that are not necessarily found in written documents from official archives. Also, the interview poses an advantage to the historian inasmuch as he can ask whomever he wants to ask about whatever he wants to know. He is not tied down by the often accidental findings in archives. This means that interviews and other kinds of oral documents, as historiographical tools, can lend voice to

¹⁰⁷ Wallot, J.-P. and N. Fortier (2002). "Archival science and oral sources". *The Oral History Reader*. R. Perks and A. Thompson. London, Routledge: 365-379, p. 365.

¹⁰⁸ Ibid., p. 367.

¹⁰⁹ Ibid., p. 373.

The Cancer Centre That Never Was

people who are not often heard in history¹¹⁰. People in the periphery often provide (more) interesting accounts of an event than the prominent actors who have accounted for their actions many times before¹¹¹. Last, but certainly not least, the interviewees can lead you to new archival materials that you would not otherwise have retrieved¹¹².

As mentioned above, this thesis has used a transcribed recording of a meeting that debates one of the failed attempts to establish a Danish cancer centre at which more than 250 cancer researchers were present and allowed to present their opinion on the centre plans. This has been a very useful tool as it reflects how the researchers regarded the cancer centre at the time and not how they see it in retrospect, as is the case with interviews done many years after the actual historical events in question. Perhaps this advantage over the post-event interview was realised too late, as a number of cancer researchers and administrators affiliated with the Danish cancer research field (1981-1998) were also interviewed, but many of the interviews have not been used¹¹³. However, the interviewees' perceptions of the cancer centre concept and its value as an organisational tool differed remarkably from the written sources and meeting transcripts of the time. So, although a number of people have been interviewed for the thesis, the interviews have only been used as documentation if their "present" opinions were important. In addition to being produced later in time than the meeting transcripts, the oral interviews also address a different "audience". That is, while most written and oral documents from the period in question comment on an ongoing debate and while their authors address either the public, their colleagues or both; the persons interviewed address a historian who is about to describe a past part of their lives. The two situations and types of audiences may result in different accounts of the events.

¹¹⁰ Thompson, P. Ibid.: "The voice of the past". R. Perks and A. Thompson: 21-28, p. 24.

¹¹¹ Chadarevian, S. d. (1997). "Using Interviews to Write the History of Science". The Historiography of Contemporary Science and Technology. T. Söderqvist. Amsterdam, Harwood Academic Publishers: 51-71, p. 52 & 64.

¹¹² Thompson, P. (2002). "The voice of the past". The Oral History Reader. R. Perks and A. Thompson. London, Routledge: 21-28, p. 24.

¹¹³ I chose the interviewees by examining archival material such as meeting minutes, annual reports, and personal correspondence for the actors of most relevance. These printed sources have given an outline of the field and its contenders, and they have thus provided me with a provisional list of actors that could be interesting to interview for the project. During each interview, I asked the interviewee for suggestions for other potential interviewees. This circular process left me with a list of names who agreed to an interview (see Appendix B).

1.7 The structure of the thesis

The thesis contains five main chapters (chapters 2-6) in chronological order. Chapters 2-6 each include a brief summary and a gallery of the chapter's key persons and their summarised actions. These galleries serve as the reader's "guide books" only.

Chapter 2 deals with the period from 1945-1973 during which the dream of a cancer centre was introduced to the Danish cancer community and the first failed efforts to put the dream into practice appeared. Path creation.

Chapter 3 deals with the period from 1979-1984 during which two of the government's research councils issued a report on the state of Danish cancer research and revived the idea of a wide-ranging – or comprehensive – national cancer centre in order to solve the coordination problems of Danish cancer research. Path re-actualisation.

Chapter 4 deals with the period from 1984-1987 where several public and private negotiation parties from the cancer community planned for a comprehensive cancer centre in the Rockefeller building. The chapter describes the planning process, its failure and the reasons therefore. Path perpetuation.

Chapter 5 deals with the period from 1987– 1992 during which the negotiation parties were in conflict with each other trying to reach agreement on the form of new and privately financed and controlled centre presented as the alternative for collapsed Rockefeller plans. The chapter will describe and analyse the planning process and subsequent dismissal of the centre plans. Path dissolution.

Chapter 6 briefly deals with the period following the collapse of the Finsen plans in order to illustrate whether or not the cancer centre dream was continued, replaced by logical alternatives or laid to rest.

Chapter 7: Conclusions and answers to the main thesis questions posed in chapter 1.

Attached to this thesis are six appendices which are meant as a help to the reader:

Appendix A: A list of abbreviations used in the thesis.

Appendix B: A list of persons interviewed for this thesis.

Appendix C: 1) A list of the members of the central organs of the Cancer Society

2) A list of the members of NSRC and the MRC 1981-1998.

Appendix D: A brief description of the key institutions central to this thesis.

Appendices E and F: Maps of the location of key institutes/organisations

1.8 Language

The present thesis has been written in English, although this is not the author's first language, because the use of the English language increases the range of potential readers. However, the main part of the archival materials and articles used for this project are in Danish. All quotations from them have been translated into English by the author of this thesis.

Chapter 2 The early efforts

Path creation

From the onset, the organisation and financial support of Danish cancer treatment and research were primarily on private hands. But in the 1940's, the prominent Danish cancer researcher Dr. Julius Engelbreth-Holm proposed a way for the State to lead the war on cancer through establishing and operating a wide-ranging cancer centre like the ones he had seen in the US. He strongly believed that such a thing was the ideal organisational tool to coordinate the Danish anti-cancer efforts. In 1949, the Danish Government made an unprecedented decision to co-finance the establishment of a private-public version of the cancer centre proposed by Engelbreth-Holm, and with it the institutional matrix to promote one of the most persistent ideas in the Danish cancer research community: The value of a comprehensive cancer centre.

2.1 Organising the anti-cancer cause: The international scene

While archaeology suggests that cancer in all the forms this disease takes has always been with us, organised attempts to control the disease and the construction of hospitals for the treatment of it are far more recent phenomena¹¹⁴. In other words, the anti-cancer cause – defined as the organised fight against cancer through research, treatment, prevention, public education, creation of institutional structures for these activities, fundraising and lobbying – took on form only late in history compared with the disease it worked against. By the mid-19th century, French and Italian researchers had independently collected the first pieces of cancer statistics in the world and reached the same conclusion: cancer was generally more widespread than expected, and due to cancers of the breast and uterus, cancer death rates were rising among women in particular¹¹⁵. This increased the public focus on the disease, and it was not unusual for prominent lay persons to appeal to different authorities through newspapers and demand that something be done to stop the enemy within. But what could be done? Surgery had proved to be the only known treatment, and even that was not all too successful. During the 19th century, this increasing focus on cancer and cancer treatment motivated the development of a variety of

¹¹⁴ Murphy, C. C. S. (1989). "From Friedenheilm to Hospice: A century of cancer hospitals". The Hospital in History. L. Granshaw and R. Porter. New York, Routledge: 221-241, p. 221.

¹¹⁵ On early cancer statistics and cancer epidemiology in the US, see: Patterson, J. T. (1987). The Dread Disease: Cancer and Modern American Culture. Cambridge, Harvard University Press, p. 78-79.

The Cancer Centre That Never Was

public and private specialist cancer hospitals in France, the UK and the US¹¹⁶. In contrast to other specialist hospitals, these hospitals did not *primarily* promote themselves as entrepreneurs of scientific medicine. According to historian Caroline Murphy, the cancer hospitals were also established with the purpose of creating hospices or “Friedenheims” where incurable cancer patients – who were denied treatment at the large general hospitals in order to “massage” the hospital statistics – could go and die in peace and relative comfort¹¹⁷. The cancer hospitals offering different treatment modalities and palliative care depended on a steady clientele and philanthropic support, and clinical laboratory research was only given some priority there in the hope that the discovery of a cure for cancer would someday make the Friedenheims obsolete¹¹⁸. In the 19th century some British cancer hospitals were set up by medical practitioners with ambitions of making money on cancer treatment, and the medical profession therefore regarded them as “quack emporia”¹¹⁹ as the medical cures for cancer offered at most of these places were considered to be the result of quackery and not a valuable contribution to scientific medicine¹²⁰.

But in spite of this, the practice of cancer treatment was strongly affected by major innovations at the end of the 19th century: the professionals’ belief in the positive effects of cancer surgery such as radical mastectomy and hysterectomy increased, and at the same time the methods of physiological research repeatedly proved effective in the control of infectious diseases¹²¹. This

¹¹⁶ Cantor, D. (1993). "Cancer". Companion Encyclopedia of the History of Medicine. W. F. Bynum and R. Porter. London, Routledge: 537-61, p. 547.

For more on the development of cancer hospitals in UK: see, Murphy, C. C. S. (1989). "From Friedenheim to Hospice: A century of cancer hospitals". The Hospital in History. L. Granshaw and R. Porter. New York, Routledge: 221-241, who shows how the progress of cancer treatment modalities transformed the hospitals’ cancer units from being hospices for the incurable patients to being hospitals with laboratories and offering research based treatment.

¹¹⁷ Murphy, C. C. S. (1989). "From Friedenheim to Hospice: A century of cancer hospitals". The Hospital in History. L. Granshaw and R. Porter. New York, Routledge: 221-241, p. 222. As Murphy points out, the histological nature of the variety of growths diagnosed as cancers in the past is now a matter of speculation, but she states that it is a fact that “cancer” patients were regularly admitted to the surgical wards of general hospitals. However, if they were considered to have inoperable cancers, they were denied access. According to Patrice Pinell, “inoperable” or “incurable” cancer was diagnosed in cases of relapse after treatment or in cases of ulcerated cancer. Pinell, P. (2002). The Fight against Cancer: France 1890-1940. London, Routledge, p. 9.

¹¹⁸ Murphy, C. C. S. (1989). "From Friedenheim to Hospice: A century of cancer hospitals". The Hospital in History. L. Granshaw and R. Porter. New York, Routledge: 221-241 p. 221.

¹¹⁹ Cantor, D. (1993). "Cancer". Companion Encyclopedia of the History of Medicine. W. F. Bynum and R. Porter. London, Routledge: 537-61, p. 547.

This was also the case for the medical profession’s attitude towards many other specialists and specialist hospitals in Britain. see: Granshaw, L. (1989). "Fame and fortune by means of bricks and mortar: the medical profession and specialist hospitals in Britain 1800-1948." The Hospital in History. L. Granshaw and R. Porter. New York, Routledge: 199-220, p. 200.

¹²⁰ Murphy, C. C. S. (1989). "From Friedenheim to Hospice: A century of cancer hospitals". The Hospital in History. L. Granshaw and R. Porter. New York, Routledge: 221-241 p. 225.

¹²¹ Pinell, P. (2002). The Fight against Cancer: France 1890-1940. London, Routledge, p. 20.

The Cancer Centre That Never Was

gave rise to a burgeoning public and philanthropic interest in a *laboratory based* search for the cause(s) of cancer and the discoveries of the effects of X-rays (discovered in 1895), radioactivity (1896) and radium (1898) on biological tissue gave new hope to both the public and the cancer investigators that more effective means of treatment were on the way¹²². In effect, the investment in Friedenheims for the incurable cancer patients seemed more and more inappropriate, and cancer hospitals concluded that research was more likely to attract support than palliative care and consequently dropped their plans for more Friedenheims and opened research laboratories instead¹²³. According to Murphy (1989), the hospitals that adopted this scientific approach to cancer diseases tended to be the ones that survived into the 20th century¹²⁴. In this way, the new discoveries shaped the cancer hospitals.

In the terminology of Douglass C. North, a change in relative prices in the form of new technological possibilities can result in a new institutional equilibrium in favour of change, as seen in Kurt Jacobsen's work on the development of a Danish telecom system where an initial plan to nationalise private telephone companies was postponed for almost a century until a change in relative prices such as the technology of automation, cable TV, digitalisation fibre optics and also a change in tastes and preference in the form of neo-liberalism made a nationalisation of the telecom services the most appealing solution to all parties in the 1990s¹²⁵. Likewise, the medical breakthroughs of the late 19th century created new opportunities for treatment and thus new medical, private and political incitements to prioritise the construction of actual treatment facilities rather than just having Friedenheims for terminal patients. In other words, the new medical knowledge and technology brought about hope and possibilities that changed the institutional matrix in favour of a multifaceted anti-cancer cause that exceeded

¹²² The use of X-rays in the treatment of cancer followed in 1896, only a year after their discovery, when Dr. Despignes of Lyon attempted to treat a patient with malignant stomach tumour. The patient died soon after, and side effects of X-rays were quickly discovered by those who operated the machinery used for emission of X-rays. The effects ranged from simple hair removal of the body parts exposed to the rays to third degree burns or even tissue necrosis. However, the technique was soon improved by Swedish radiologists who managed to obtain good results from applying the technique to the treatment of cancer of the skin in 1899. By 1902, the American Dr. Coley reported to the American Surgical Association that radiotherapy produced a clear action on neoplasms even when the cancers were deep. Ibid. p. 20-23. According to Pinell, the use of Radium in cancer treatment was promoted by Pierre and Marie Curie and Henri Becquerel who suggested to French doctors that the substance might be useful in this respect, and a new field of radium treatment of cancer appeared in 1901, Pinell, P. (2002). The Fight against Cancer: France 1890-1940. London, Routledge p. 25 & 34.

¹²³ Murphy, C. C. S. (1989). "From Friedenheim to Hospice: A century of cancer hospitals". The Hospital in History. L. Granshaw and R. Porter. New York, Routledge: 221-241, p. 227-228.

¹²⁴ Ibid. p. 228.

¹²⁵ Jacobsen, K. (2005). "Institutional change and path dependence in Danish telecom development." Paper presented at the conference "Cross-Connections: Communications, Society and change", Science Museum London, 11-13 November 2005: 1-16., p. 4.

The Cancer Centre That Never Was

traditional surgery and changed the nature of the cancer fighting organisations/hospitals. But what was cancer research at these places?

The progress of physiological research and the development of bacteriology in the 1870s heralded a new era of scientific and laboratory-based approaches to medical problems. The young discipline of bacteriology was based on the “germ” theories of German physician Robert Koch and French chemist Louis Pasteur who defined disease as something being caused by different types of invading “germs”¹²⁶. Apart from being a powerful tool for categorising different diseases according to the germs that caused them, bacteriology also paved the way for the prevention of diseases through vaccination – which is immunisation by means of injecting a suspension of specific and weakened micro-organisms¹²⁷. As a consequence, both researchers and interested laymen started to wonder whether or not cancer, too, was caused by microscopic organisms, and if a cancer vaccine would be feasible? However, far from all researchers were convinced that the cause was in fact a micro-organism, and the hope of finding the cause and subsequently the cure for cancer led the investigators to produce a wealth of hypotheses on the aetiology of cancer.

These generally belonged to one of two groups: The group of theories that attributed the development of cancerous growth to *endogenous* factors, and the group of theories attributing the cancerous development to *exogenous* factors¹²⁸. Vivid discussions took place between the advocates of the different viewpoints, and there were debates as to whether cancer had one or even multiple causes. The theories were manifold and proposed by investigators of different disciplinary affiliations. Cancer research at the turn of the century was thus not shaped by any *one* theory on the subject. The field developed from interplay of different and often competing theories, as new experimental data either supported or discarded them¹²⁹. In general, those who subscribed to the hypotheses of an endogenous cause of cancer agreed that tumours developed due to some sort of *internal* biological irregularity turning normal cells cancerous – that is, cancer could be hereditary or a result of some sort of isolated biological breakdown.

¹²⁶ Porter, R. (2003). *Medicinenes Historie*. København, Rosinante Paperbacks, p. 428.

¹²⁷ For more on Pasteur and the development of the concept of disease causation, see Carter, K. C. (1991). "The Development of Pasteur's concept of disease causation and the emergence of specific causes in nineteenth-century medicine." *Bulletin of the History of Medicine*: 528-48.

¹²⁸ Helvoort, T. v. (1999). "A Century of Research into the Cause of Cancer: Is the New Oncogene Paradigm Revolutionary?" *History and Philosophy of the Life Sciences*: 293-330, p. 293-330.

¹²⁹ Ibid.

The Cancer Centre That Never Was

The advocates of an exogenous cause, on the other hand, claimed that the aetiology of cancer was in fact environmental and could be induced by an *external* agent of chemical, parasitical or physical nature. Since 1775, it had been well known that there was an unusually high incidence of a specific type of cancer among chimney sweeps, and as more reports on the correlation of certain types of cancers and particular occupations increased in number throughout the 19th century, more people subscribed to the theory that cancer could be caused by factors outside the body such as coal tar, tobacco, mine dust or even strong exposure to sunlight, which was believed to be the cause of skin cancer among fishermen¹³⁰. Although such theories of chemical and physical carcinogenesis received backing from many investigators, the most widespread exogenous theory of cancer focused on biological agents instead¹³¹.

It is not within the scope of this dissertation to describe the international development of early experimental cancer research in all its forms. However, it is important to note that the growing scientific and philanthropic interest in the laboratory-based approaches to cancer gave momentum to a wave of professionalization of cancer research as a scientific field in the form of

¹³⁰ Varmus, H. and R. A. Weinberg (1993). Genes and the Biology of Cancer. New York, Scientific American Library, p. 45-46.

¹³¹ Among the most famous Danish propagators of exogenous theories were the physician-veterinarian team of Vilhelm Ellermann and Oluf Bang, whose work on chicken leucosis in 1908 suggested that at least some types of cancer were caused by a *virus*, see Ellerman and Bang (1908). "Experimentel Leukæmi hos Høns I." Oversigt over Det Kgl. Danske Videnskabernes Selskabs Forhandlinger. And in 1913, J. A.G. Fibiger claimed to have stumbled across a phenomenon which he believed could be used to induce cancer experimentally, see Nielsen, H. and K. Nielsen (2001). Nabo til Nobel - Historien om tretten danske Nobelpriser. Gylling, Aarhus university Press, p. 382. For this, Fibiger was awarded the Nobel Prize in Physiology or Medicine in 1926 as the first cancer researcher in history. However, no one has ever managed to reproduce the results of his experiments and they have since been the subject of much scrutiny. The most famous Danish proponent of an endogenous cause of cancer was the veterinarian C. O. Jensen. Inspired by the German investigator, Arthur Hanau, Jensen carried out a series of experiments between 1901 and 1903, where he studied spontaneous alveolar carcinomas in white mice, (see Jensen, C. O. (1903). "Eksperimentelle undersøgelser over kræft hos mus." Hospitalstidende 11: 581, p. 581). He demonstrated that a piece of this type of tumour could be transplanted from cancer-struck rodents into healthy ones, in which the piece would subsequently grow into a new tumour of the same histological type, (see Thomsen, O. (1935). "Mindeord over C.O. Jensen." Oversigt over Det Kgl. Danske Videnskabernes Selskabs Virksomhed 1934-1935, p. 109-111). Jensen succeeded in propagating a spontaneous alveolar carcinoma through 19 generations of white mice, and thus established a rodent tumour line, through which he and other researchers could study the properties of the original tumour over longer periods of time now that the tumour was no longer dying with the host, (see Triolo, V. A. (1964). "Nineteenth Century Foundations of Cancer Research: Origins of Experimental Research." Cancer Research 24: 4-27, p. 10). Jensen's experiments with tumour propagation demonstrated beyond any doubt that the cancerous growth in his new rodent-host was caused by the transfer of intact cancer *cells* and not by some infective *microbe*. More importantly, he produced an experimental tool – the tumour line – that opened up new vistas in the study of cancerous cells, and many European laboratories sent for samples of Jensen's transplantable tumour line in order to investigate the metabolism, growth mechanisms, and morphology of the cancer cells. His discoveries have even been described as being "the starting point for most of the experimental mouse tumour research in Europe and the United States", (see Thomsen, O. (1935). "Mindeord over C.O. Jensen." Oversigt over Det Kgl. Danske Videnskabernes Selskabs Virksomhed 1934-1935, p. 110). Later in the 20th century, many of the discrepancies between different theories on aetiology of cancer were considered to be due to the fact that the cancer researchers had not been working on the same type of cancer and due to multi-causality.

The Cancer Centre That Never Was

specialist research labs, specialist journals, international cancer congresses (1906-1913), and cancer organisations¹³². That is, the change in relative prices in the form of new treatment modalities and research-based breakthroughs in the aetiology of diseases and the change in taste and preferences (the public interest and contributions to the war on cancer brought about by the aforementioned medical breakthroughs) changed the institutional matrix for the anti-cancer cause/the cancer field.

According to Douglass C. North, such change gives rise to new organisations utilising the new opportunities created by this change, and this was certainly the case here. In the first two decades of the 20th century, a number of professional societies and lay organisations were set up with the purpose of fighting cancer by raising funds for the support of cancer research – e.g. *The Imperial Cancer Research Fund* of 1902 in Britain¹³³ - and for the so-called cancer control¹³⁴ in the form of organisations such as *The American Association for Cancer Research* (1907), *The American Society for the Control of Cancer* (1913)¹³⁵, *Deutsches Komitee für Krebsforschung*

¹³² Cantor, D. (1993). "Cancer". *Companion Encyclopedia of the History of Medicine*. W. F. Bynum and R. Porter. London, Routledge: 537-61 p. 548.

¹³³ For more on the creation of the ICRF and other British cancer organisations: see Austoker, J. (1988). *A History of the Imperial Cancer Research Fund 1902-1986*. Oxford, Oxford University Press. The Imperial Cancer Research Fund stands out from the rest of the mentioned organisations in as much as it focused primarily on cancer research rather than on *cancer control* (see below).

¹³⁴ According to historian David Cantor, *cancer control* had many different meanings in different countries and points of history. However, I adopt Cantor's general definition of cancer control as the scientific and medical efforts to control cancer mortalities and incidences, to control cancer diseases as biological entities, and the efforts to control the human activities and structures that work against these goals by hindering or delaying the cancer patients from consulting their doctor and detecting the disease at an early onset. That is, e.g. by educating the public on which danger signs to be aware of in their bodies, and by instructing them to consult their doctor, if the signs should occur. Cantor, D. (2007). "Introduction: Cancer Control and Prevention in the Twentieth Century." *Bulletin of the History of Medicine* 81: 1-38, p. 4. Historically, the definition has been discussed and changed with regards to the role of experimental cancer research in cancer control. For example, there has been some discussion in the US in 1946-1957 of whether experimental cancer research is to be considered a part of cancer control or not, as cancer research proved to be a competitor to cancer control for appropriations, Breslow, L., D. Wilner, et al. (1977). *A History of Cancer Control in the United States, with Emphasis on the Period 1946-1971*. Bethesda, Division for Cancer Control and Rehabilitation, National Cancer Institute, vol 1, p. 1 and vol 2 p. 578-579. According to Breslow et. al, (1977), recognised cancer control activities include: prevention, screening and detection, diagnosis and pre-treatment, evaluation, treatment, rehabilitation, public and professional education, and continuing care, and in a later article on cancer control from 1988, Dr. Lester Breslow from the Division of Cancer Control at the Jonsson Comprehensive Cancer Centre (US), and Dr. William G. Cumberland from UCLA, (California) continued this exclusion of experimental cancer research from the definition of cancer control by stating that "understanding biologic mechanisms can be useful but is not essential for important progress in disease control. Experience with cholera, scurvy, and several other diseases – including lung cancer – has shown that disease prevention is feasible even without knowing the precise biologic or chemical agents that are responsible or the bodily mechanisms involved. Hence, research aimed directly at cancer prevention and promoting use of available knowledge for cancer prevention is highly desirable in the present state of cancer control", Breslow, L. and W. G. Cumberland (1988). "Progress and Objectives in Cancer Control." *JAMA* 259: 1690-1694, p. 1694.

¹³⁵ For more on the American cancer organisations and the American anti-cancer cause in general, see:

The Cancer Centre That Never Was

(1900), and the French *L'Association Francaise pour l'étude du Cancer* (1908). A common trait for most of the new cancer organisations was that they believed that there was a better chance of treating cancer effectively, if it was diagnosed at an early point of its development. For this reason, many of the organisations believed that it was important to educate the public on which cancer warning signs to be aware of in their own bodies and to get them to seek medical help as soon as possible so that they could be referred to treatment facilities that mastered surgery and/or the new radiotherapy. In this way, both *public education* on cancer and *cancer treatment* were part of an organised attempt to control the disease – cancer control. Many countries developed cancer policies and programs in cancer control with these shared goals, but they often disagreed on how to reach them. There were national differences in the way the countries perceived of e.g. the role of public education in cancer control, what form of treatment was most appropriate for particular cancers, and how cancer treatment should be given to cancer patients – and by whom?¹³⁶

Triolo, V. A. and M. B. Shimkin (1969). "The American Cancer Society and Cancer Research - Origins and Organization: 1913-1943." *Cancer Research* **29**(9): 1615-1641 who describe the establishment of the American Cancer Society and the lay lobbyist engaged in the American anti-cancer efforts.

Rettig, R. E. (1977). *Cancer Crusade*. Princeton, New Jersey, Princeton University Press who provides a historical account of the establishment of anti-cancer associations in US and the Lasker group's lobbyism for a federal cancer program.

Breslow, L., D. Wilner, et al. (1977). *A History of Cancer Control in the United States, with Emphasis on the Period 1946-1971*. Bethesda, Division for Cancer Control and Rehabilitation, National Cancer Institute which is a history of cancer control in the US in 1946-1971, its scientific and technical advances and the programmatic developments done in the field by the federal government and the ASCC/ACS.

Patterson, J. T. (1987). *The Dread Disease: Cancer and Modern American Culture*. Cambridge, Harvard University Press who gives a cultural history of cancer and its representation in US society and the organisational means employed to fight the disease from 1880-1980.

Erdey (1995). *Armor of Patience: The National Cancer Institute and The Development of Medical Research Policy In the United States*, Case Western University. who gives a political history of the development of the National Cancer Institute and federal cancer research policy in the US in 1937-71.

¹³⁶ Cantor, D. (2007). "Introduction: Cancer Control and Prevention in the Twentieth Century." *Bulletin of the History of Medicine* **81**: 1-38, p. 3. For instance, in the US, public education was a much more dominant part of the country's cancer control programs than in the early UK programs, where the medical authorities feared that education on cancer danger signs would e.g. more likely scare the patients away from the doctors' offices rather than into them, and thus focused on professional education of physicians instead.

On cancer control in the United States, see:

Breslow, L., D. Wilner, et al. (1977). *A History of Cancer Control in the United States, with Emphasis on the Period 1946-1971*. Bethesda, Division for Cancer Control and Rehabilitation, National Cancer Institute, vol. 2, p. 500-501. In the US, organised cancer control programs began in 1913 with the establishment of the private and voluntary American Society for Cancer Control (ASCC), whose aim was to make the public aware that cancer could be controlled through e.g. early detection. The ASCC used the media to spread their message, and other similar societies followed suit. In the public sector, some states organised cancer control as early as 1898. Also the Public Health Service statistician J. Schereschewsky analysed the distribution of cancer deaths in the nation, and called for cancer control to be made a matter of federal concern. However the federal government was late to act on this and not until 1937, with the National Cancer Institute-act, did it put it to practice as the NCI was given mandate to study the cause, prevention, diagnosis and treatment of cancer.

The Cancer Centre That Never Was

Within the conceptual framework of North and Bourdieu, this development can be explained accordingly: the change in relative prices caused by medical progress prompted many countries to react similarly by reorganising their fight against cancer, as science is universal. But the national differences were due to local institutional constraints. Cancer control and the other aspects of the anti-cancer cause were therefore organised differently within different national frames with regard to its organisational and disciplinary structures, the inter-relations between groups of specialists (e.g. surgeons and radiotherapists), and the part played respectively by the State, local organisations, private associations and public health organisations¹³⁷. The specific Danish structure and way of organising its anti-cancer cause will be described in the following.

2.2 Organising the anti-cancer cause: the Danish framework

In order to understand the rise and organisational structure of an anti-cancer movement in Denmark, it is necessary to briefly depict the structures of the Danish health care system and the formal institutional matrix that shaped its development. The following six pages is an introduction to this – and at the same time a background history of the emergence of cancer fighting organisations in Denmark.

Patterson, J. T. (1987). The Dread Disease: Cancer and Modern American Culture. Cambridge, Harvard University Press, who describes how the initiatives to educate the American public on cancer signs.

Lerner, B. H. (2001). The Breast Cancer Wars. Fear, Hope and the Pursuit of a cure in the Twentieth Century America, Oxford University Press., who describes the American discussions on the most appropriate treatments for breast cancer (e.g. effectiveness of Halstad's radical mastectomy vs. its mutilating side-effects) and the American Cancer Society's and the federal government's campaigns to educate women to self examine their breasts in the hope of discovering cancer at an earlier and perhaps more treatable stage. Lerner's history is on the war on breast cancer, the shifting choice of treatment modalities, on the nature of the control campaigns, and on the stigmatisation of cancer stricken women in 20th century US.

On France, see: Pinell, P. (2002). The Fight against Cancer: France 1890-1940. London, Routledge, Pinell, P. (1991). "Cancer Policy and the Health System in France: "Big Medicine" Challenges the Conception and Organization of Medical Practice." Social History of Science 4(1): 75-101, who describes how the French government was persuaded by an anti-cancer association and individual investigators during the World War I to utilise the wartime mobilisation of expert medical teams and cross-disciplinary training institutes to build cancer treatment centres in order to protect the public against the peril of cancer and to standardise the treatment offered to patients and the training of personnel. In these centres, early detection of cancer (and thus cancer education on what to look for) was valued much.

On Germany, see: Proctor, R. N. (1999). The Nazi War on Cancer. Princeton, Princeton University Press. This book is on the progressive and sometimes even socially responsible works on cancer control done by Nazi doctors and public health activists; a direct outgrowth of Nazi ideology. For instance, the Nazi health officials worried about the harmful effects of tobacco and asbestos which epidemiological and preventive studies had linked with specific cancers.

On Canada, see: Hayter, C. R. (2005). An Element of Hope: Radium and the Response to Cancer in Canada. Montreal, McGill-Queen's University Press, who describes the Canadian government's efforts to establish centralised treatment programs in Ontario as part of its cancer control efforts.

¹³⁷ Pinell, P. (1991). "Cancer Policy and the Health System in France: "Big Medicine" Challenges the Conception and Organization of Medical Practice." Social History of Science 4(1): 75-101, p. 76.

2.2.1 The emergence of a Danish health care system

Historically, the Danish state has played a dominant role in the professionalization and structuring of Danish health services. In the 17th century, the absolute monarch, King Christian V, secured the university-trained physicians' monopoly on the treatment of internal illnesses, while surgery was considered a craft for the barber guild¹³⁸. This was done in an attempt to professionalise the practice of medicine which due to the scarcity of trained physicians was most often practiced by self-taught citizens using non-scientific remedies handed down from generation to generation. Nevertheless, the State's favoritism of academic medicine over folk tradition and remedies during the next century owed not to its impressive effectiveness but rather to a royal wish to protect the health and working ability of the country's many peasants who were considered of the utmost importance for Danish military and economy¹³⁹.

This tendency of state responsibility for the health of the people was exemplified in 1740 with a royal decree to establish the Collegium Medicum, a medical agency with a threefold purpose of surveying the public health, controlling the medical practitioners and advising the King and his central administration of lawmen on medical issues and policy¹⁴⁰. Also, the tradition was continued in a 1782 royal decree on infective diseases which made it mandatory for any county official or estate-owner to secure peasants medical assistance from royally appointed district physicians or other university trained medics¹⁴¹. In essence, the Danish tradition for a publicly supported health service system for those who could not afford to pay for the services themselves was created not by socialist ideals but rather by a mercantilist protection of the country's workforce and economic backbone.

In 1841, the different branches of health services were given a common exam at the country's only university, Copenhagen University, and its medical faculty. Now both physicians and surgeons had to be academically trained in order to practice. However, the centralisation of the country's only medical education and medical knowledge was at least in part responsible for the lack of physicians/surgeons in the province. Outside Copenhagen, only a small number of private practicing doctors were treating people in their own homes for money. Nevertheless, for each large district, a physician/surgeon was appointed by the King/later State as district medical heads with responsibility for overseeing the private practitioners and midwives in the area and to

¹³⁸ Jacobsen, K. and K. Larsen (2007). Ve og Velfærd - Læger, sundhed og samfund gennem 200 år. København, Lindhardt og Ringhof, p. 18.

¹³⁹ Ibid.

¹⁴⁰ Ibid., p. 20.

¹⁴¹ Ibid., p. 18.

The Cancer Centre That Never Was

function as the local political authority's advisor on health related issues¹⁴². Hospitals were usually established where such district physicians resided.

Before 1840, there were only about 30 hospitals in Denmark, and most of the provincial hospitals were little more than a couple of sinister rooms used for isolating poor people with e.g. highly infectious venereal diseases¹⁴³. The hospitals thus served as part state part municipally financed poor-law authority for paupers, while more wealthy citizens avoided the hospitals by any means and paid for treatment in their own homes by private practitioners. However, in Copenhagen, hospitals were of a different nature and encompassed clinical education of new physicians and surgeons. Following a smooth transition from absolute monarchy to constitutional monarchy – leading to a central administration of ministries with each their minister in the late 1840s – the country experienced a massive increase in the construction of public institutes such as schools, poor houses, prisons and hospitals. And as more and more people were educated from the Medical Faculty in Copenhagen, more trained physicians and surgeons chose to practice medicine in the province at either the new publicly funded hospitals or privately. Even though the middle and upper class still chose to pay to be treated in their own homes by private practitioners, new surgical and medical treatments were surfacing by the mid 19th century, and some of these required special surgical wards and thus hospitalisation of patients regardless of social standing¹⁴⁴. The hospitals evolved from being extensions of poor houses to gradually becoming general treatment centres, strongly promoted by the newly established (and health service responsible) Ministry of Law and the wealthy citizens who pleaded for the hospital system to be separated from the poor-law system which the wealthy citizens disliked being associated with¹⁴⁵.

The hospitals were getting a new reputation amongst the middle and upper classes, and they would eventually be transformed from poor houses with generalist physicians to modern treatment facilities with electric lighting and central heating with the sole purpose of treating the sick by scientifically based principles for treatment and care. However, with the separation of the poor-law system and the hospital system, more people chose to be treated at the hospitals rather than in their own homes, and the hospitals eventually got overloaded and crowded. The Danish hospital system was a three-tiered system of locally financed and administered hospitals

¹⁴² Ibid., p. 20.

¹⁴³ Ibid., p. 22-32

¹⁴⁴ Ibid., p. 108.

¹⁴⁵ Ibid.

The Cancer Centre That Never Was

(municipal, county or state owned) with each their tier governed by popularly elected bodies. All experienced an increase in the number of admissions at the hospitals which was of course in line with the purpose of securing public health and which at the same time provided important clinical material for medical students, but which still posed a problem in times when epidemics such as polio and cholera claimed more and more victims. As for financing the hospitals, the Danish counties had had the right to taxation instituted since 1806 in order to stimulate the development of the hospital sector, and as a consequence the construction and operation of the hospitals in Denmark became largely financed by local taxes.¹⁴⁶

Because of the overcrowding at the hospitals, voluntary public and state-supported sickness insurance was introduced in 1892 in order to ensure the less than wealthy citizens treatment in their own homes like the wealthy citizens¹⁴⁷. In fact, sickness insurance had been a tendency (in a privately financed version)¹⁴⁸ since 1857, when the Danish medical association was created and gave the profession a stronger standing. And the increasing wealth of the Danish population and the growth of the cities gave rise to a strong primary health service sector consisting of private practitioners (more than half of the collective number of physicians in the country) while the secondary (hospital) sector was publicly financed^{149/150}.

The international medical breakthroughs of the late 19th century on the aetiology of infectious diseases made it apparent that theoretical disciplines such as pathology and Pasteur's bacteriology had a place in modern medicine and at the hospitals. However such theoretical endeavours were not integrated at the hospitals as medical specialties in Denmark, and this made the hospitals very outdated¹⁵¹. Given that the hospitals were essential for the education of physicians and the development of Danish medicine, the introduction of medical specialties at the Medical Faculty of Copenhagen University and at the hospitals became a matter of great importance to the Danish medical associations, although conservative voices amongst the

¹⁴⁶ Haave, P. (2006). "The Hospital Sector - a four county comparison of organisational and political development". The Nordic Model of Welfare. N. F. Christiansen, K. Petersen, N. Edling and P. Haave. Copenhagen, Museum Tusculanum Press: 215-242, p. 221.

¹⁴⁷ Ibid.

Jacobsen, K. and K. Larsen (2007). Ve og Velfærd - Læger, sundhed og samfund gennem 200 år. København, Lindhardt og Ringhof, p. 115.

¹⁴⁸ Financed by professional groups/guilds, beneficiaries, and with a minor municipal contribution in order to keep the subscription fee at an acceptable level.

¹⁴⁹ Jacobsen, K. and K. Larsen (2007). Ve og Velfærd - Læger, sundhed og samfund gennem 200 år. København, Lindhardt og Ringhof, p. 221-222.

¹⁵⁰ In 1880's a Copenhagen municipalities spent approximately 7-8 % of the budget on the hospital system (ibid).

¹⁵¹ Jacobsen, K. and K. Larsen (2007). Ve og Velfærd - Læger, sundhed og samfund gennem 200 år. København, Lindhardt og Ringhof, p.168.

The Cancer Centre That Never Was

profession argued against dividing medicine into small pieces¹⁵². That is, informal institutions within the medical field (the physicians' conservative taste and preferences) had hindered the introduction. Eventually the progressive voices gained strength in numbers and this affected the matter at the level of state-dictated formal institution, as an incremental change in the institutional matrix now allowed new specialties to gain footage. The most obvious place to introduce the new specialties would be the Frederiks Hospital that had close ties to the Medical Faculty regarding the clinical education of new physicians and surgeons. In order to accommodate the new bridging of theoretical disciplines and clinical practice, the hospital would have to be rebuilt in a larger version, and in 1888-89 the Danish government decided to set up just that: a new hospital including no less than four institutes from the Medical Faculty¹⁵³. Difficulties in finding a new location for the hospital, a channeling of state funds into the country's defense and tedious political power struggles between two of the country's strongest political parties led to legislative inertia for many decades, which again led to a lack of decision regarding a proposal to reorganise the structure of the health service system in relation to independence from the Ministry of Law. This resulted in a postponing of the hospital construction and a stagnation of the development of Danish medicine and experimental medical research¹⁵⁴.

It took a widespread disease to lead the way out of the dead water and pave the way for modernisation and reorganisation of the Danish health service system, when a new generation of medical professionals led the fight against tuberculosis armed with the new theoretical approach to infectious diseases while a change in the Danish political system in 1901 led to new formal institutions favouring an increased public interest in health issues¹⁵⁵. The new system meant that the government was selected based on a majority vote in the newly established Danish parliament instead of being appointed by the King. Also, the new system was based on the

¹⁵² Ibid., p. 167-68.

¹⁵³ Ibid., p. 169.

¹⁵⁴ Ibid., p.169-171. Although the medical associations in Denmark were gaining strength and standing in society and even though physicians had been the King's and later the government's advisors on medical policy (in the form of Collegium medicus and later the Health College), the medical society's power had never been unchallenged. The ministries were the highest authority and consisted of "law-men" with a different background and with different economic concerns than the medical society. This often led to power struggles between administrators and medical advisors on getting the minister's time and ears.

¹⁵⁵ On July 23rd 1901, the first agrarian party government was established, and at the same time parliamentarism was introduced in Danish politics. This meant that a government could not keep its power if it had the majority of the parliament against it, Marke, A. W. and P. Raunskjær, Eds. (1940). *Den Lille Salmonsens*, 11, J.H. Schultz Forlag, p. 412. The working man's health was given much more priority by the new government as compared to the previous government who represented landowners and the highest classes.

The Cancer Centre That Never Was

premise that all citizens were equal and that their voice should be heard through the establishment of political parties representing the people. The political party “Venstre” represented one of the largest groups of the Danish populations, farmers and other agricultural workers, and won the power over the traditional nobility and industrialist party “Højre” which had been in government for many decades, and in contrast to Venstre advocated that the right to political influence depended on your social standing. With the political change, the voice and concerns of the people, regardless of social standing, was brought on the agenda. And as part of this, the importance of the people’s health and working ability resurfaced as a political issue. The formal institutions for prioritising health care services and their infrastructure were set.

The discovery of disease-causing germs and corresponding vaccines led to new hope in the medical profession and in the public that several diseases could be cured, prevented or managed by employing different scientifically based treatments and care strategies than what had previously been practised. This meant new ways for the state to promote public health by reorganising the medical system and its practices. The late 19th century’s discovery of the aetiology of – and vaccine for – diphtheria prompted such a state response with the 1902 establishment of the State Serum Institute for the production of vaccines¹⁵⁶. In an institutional perspective, this meant that the scientific breakthroughs (a change of relative prices) shifted the institutional matrix towards the emergence of new organisations and practices.

Tuberculosis posed a similar threat to the Danish people, and although the discovery of the bacterial origin of the disease had not resulted in an effective treatment by the turn of the century, the knowledge of its infectious nature gave rise to new precautions in the care for and behaviour of tuberculosis patients in order to reduce the spread of infection (special isolated sanatoriums, reducing the behaviour of spitting on streets etc.)¹⁵⁷. In 1895, a group of medical professionals contacted the government and its medical advisory agency the Health College, in order to make the state effectuate such precautionary measures and build sanatoriums, make it mandatory for physicians to report tuberculosis incidences, and to educate the public on the disease (free pamphlets). All this, except the construction of sanatoriums, was put into practice, but the medical professionals did not rest and managed to start a people’s movement involving the medical professional associations, politicians, the health insurance associations and a large group of private supporters with the purpose of making the state take responsibility and action:

¹⁵⁶ Jacobsen, K. and K. Larsen (2007). Ve og Velfærd - Læger, sundhed og samfund gennem 200 år. København, Lindhardt og Ringhof, p. 174.

¹⁵⁷ Ibid., p. 178.

The Cancer Centre That Never Was

equal access to treatment with the establishment of public sanatoriums for all social classes and not just for the rich.

In January 1901, the national society for the fight against tuberculosis was established with the purpose of getting the Danish people to cooperate and support the war against the disease¹⁵⁸. It was a private enterprise, a people's cause, which was eventually supported by the government¹⁵⁹. The idea was to collect private funds to establish sanatoriums and get the state and the health insurance associations to fund the running of the places. Money poured in, and the cause got the governments attention. In 1902, new laws were passed to ensure better and state-funded tuberculosis treatment at the privately established sanatoriums¹⁶⁰. During the next 25 years, the society and the State managed to establish a system of treatment facilities unmatched in the world, with state-expenditures growing from DKK 75.000 to DKK 4.5 million in 1920¹⁶¹.

The immediate success of using the public opinion as leverage for policy-making was noticed and created a new role for medical professionals as "lobbyists" in the years to come. The success made the organisational structure and objective of the tuberculosis society a template for many other medical causes that needed to organise a people's cause to raise state funds: such as the first Danish society concerned with *cancer*. Interestingly, after 25 years of organised and state-funded fight against tuberculosis and the establishment of new facilities, physicians were not all too happy with the result. The reduction of tuberculosis-related deaths had not been convincing compared with the outset, and the question arose: was it worth the money¹⁶²? However, this ominous question that was about to shape the future organisation of the Danish health care sector had not yet been asked, when the country's first organised fight against cancer took form.

2.2.2 The Danish anti-cancer cause

The first step towards organising the anti-cancer cause was taken by the Danish physician and gynaecologist Niels Peter Ernst in 1904-05. During a stay in Vienna, Ernst had worked with the German Professor Ernst Wertheim in the development of a new and better surgical method for

¹⁵⁸ Ibid., p. 179.

¹⁵⁹ Rud, E. (1937). Radiumfondet og Landsforeningen til Kræftens Bekæmpelse 1912-1937. København, Egmont H. Petersens Kgl. Hof-Bogtrykkeri, p. 8.

¹⁶⁰ Jacobsen, K. and K. Larsen (2007). Ve og Velfærd - Læger, sundhed og samfund gennem 200 år. København, Lindhardt og Ringhof, p. 182-83.

¹⁶¹ Ibid.

¹⁶² Ibid., p. 183.

The Cancer Centre That Never Was

treating cancer of the uterus (cancer uteri)¹⁶³. He had also become accustomed with the German establishment of the *Deutsches Komitee für Krebsforschung*, which was set up as early as 1900, and he was inspired to initiate a formal organisation of cancer control in Denmark. In a talk to the professional association *Danish Society for Gynaecology and Obstetrics*, he concluded that the poor results in the fight against cancer were partly due to the fact that the public was not educated on cancer and did not know which physical signs to be aware of. The general practitioners did not regularly examine their patients for cancer, and although they were bound by the epidemic law of 1888 to report incidences of the disease (believed by some to be of an infectious nature), there were no reliable cancer statistics for Denmark, as the practitioners often did not recognise the traits of cancer *as* cancer and therefore did not report it as such. For this reason, Ernst suggested the establishment of a committee with the purpose of discussing the means to fight cancer and educate the public on the disease through newspaper campaigns – a cancer control program. His proposal was welcomed by his medical society, and a committee was set up.

However, as pointed out in the works of Douglass C. North, the success of a new organisation depends on its ability to utilise and grow within the existing formal and informal institutions and constraints it moves in, and the fate of the new committee was far from what Ernst had envisioned. In 1905, the *Cancer Committee* was set up under the aegis of the *Danish Medical Association*, and it had become an academic elitist organisation that did not address the public directly¹⁶⁴ - in contrast to the successful tuberculosis movement which emphasized the importance of public education in the control of the disease. The committee consisted of 15 members, all of which were physicians except for the veterinarian C.O. Jensen, who was included because of his extraordinary achievements in tumour transplantation experiments. None valued cancer education of the public as part of cancer control. The omission of cancer education of the public reflects the preferences of the members of the committee. As opposed to the members of the tuberculosis society, the professional logic of the committee members seemed to be to subscribe to a more traditional paternalistic approach to cancer control. And no

¹⁶³ Zachariae, F. (1978). "Kræftens Bekæmpelse 50 år." *Ugeskrift for læger* **140**(43): 2666-2667, p. 2666.

Rud, E. (1937). *Radiumfondet og Landsforeningen til Kræftens Bekæmpelse 1912-1937*. København, Egmont H. Petersens Kgl. Hof-Bogtrykkeri, p. 8.

¹⁶⁴ So even though Ernst tried to promote public education as a necessary tool in cancer control, the Cancer Committee took another and rather paternalistic and elitist stance on the issue, and cancer education was not made an official objective of the Danish cancer organisation until 1928. In this respect, the Danish reservation towards public education mirrors that of Britain. See, Cantor, D. (2007). "Introduction: Cancer Control and Prevention in the Twentieth Century." *Bulletin of the History of Medicine* **81**: 1-38, p. 9 & 11.

The Cancer Centre That Never Was

other logic or capital challenged their power to “call the shots” as the cancer community was as of yet a very small and specialised niche in society.

The new objective of the committee was to find out how widespread cancer was in Denmark and to discuss the means to fight it. This was mostly done by sending out forms to general practitioners so that they could report cancer incidences among their patients, and the Cancer Committee would subsequently collect statistical data on the extent and spread of the disease in Denmark. The committee therefore decided to hire a histologist to whom physicians could send in patient tissue samples free of charge to find out whether or not their patients had developed cancer¹⁶⁵. However, these services were costly and the young committee had to secure funding for its enterprise from the private Carlsberg Foundation – a foundation that was a great patron of science and medical research in Denmark – and the Ministry of Church and Education. Because funds were scarce, the committee decided to focus on cancer uteri only, but after a few years of existence, the activities were expanded to include all types of cancer.

The collected statistical material was troubling, as Denmark appeared to have a very high incidence of cancer compared with the rest of Europe. But although the government had an interest in the improvement of public health, it did not endow the anti-cancer cause with much money or formulate any specific cancer policy – perhaps because the elitist committee had not mobilised different and broad groups in the Danish public and private sector as had the tuberculosis movement. The government did not create formal institutions that favoured the growth of anti-cancer organisations in particular, but as previously mentioned, the 1901 change of political system did increase the focus on public health issues in general, so the time was ripe to appeal to the public that had previously exhibited great interest in the subject and donated funds for the establishment of other disease-fighting organisations (a change in informal institutions in the form of the public’s taste and preferences).

The members of the Cancer Committee were not skilled fundraisers, though. They were practicing physicians with tenures or practices to tend to, and in 1910/11, the lack of sufficient funding led them to drop a plan to establish a cancer foundation for the financial support of cancer research and the treatment of cancer patients¹⁶⁶. The surgical treatment of cancer and the accommodation of patients in treatment clinics were expensive, and would not become less

¹⁶⁵ Cankerkomite, D. A. D. L. (1907). Beretning om Den Alm. Danske Lægeforenings Cankerkomite's Virksomhed 1905-1907, Aktieselsk. Nationaltrykkeriet, p. 6.

¹⁶⁶ Rud, E. (1937). Radiumfondet og Landsforeningen til Kræftens Bekæmpelse 1912-1937. København, Egmont H. Petersens Kgl. Hof-Bogtrykkeri, p. 17.

The Cancer Centre That Never Was

expensive if Denmark was to introduce the new radium treatment that was being used in other countries¹⁶⁷. Copenhagen physicians were eager to use this new tool in the fight against cancer, and in 1912 they finally turned to pleading their case in the newspapers: Denmark simply had to raise enough money to buy a sufficient amount of radium for cancer treatment at the Municipal Hospital of Copenhagen. Radium was a very expensive substance, but due to a couple of private donations, a committee for the acquisition of radium was set up and the person with the most knowledge of radium and radiation therapy in the country, Professor J. F. Fischer, was elected chairman¹⁶⁸.

Meanwhile in the Danish province of Jutland, representatives of the press had started their own collection to buy radium for the public hospital *Rigshospitalet* in Copenhagen. On July 4th 1912, the two organisations fused into the *Radium Fund*. Following the passing of King Frederik VIII, the Danish people had collected money for gold and silver wreaths for the royal bier, but the new king preferred to donate the money to the Radium Fund to purchase radium¹⁶⁹. In this way, the acquisition of radium was funded by private contributions, but the Radium Fund was managed by a group consisting of such prominent figures as the Minister of Church and Education, Jacob Appel, Professor Fischer, representatives from the press, hospitals, the trades and industry, and finally the cancer researcher Johannes Fibiger, who represented the Danish Cancer Committee in a newly established collaboration between the two organisations. In 1912-14, the Radium Fund bought 125 mg of radium from Paris and established cancer clinics for radiation therapy (so-called *radium stations*) in Copenhagen, Aarhus¹⁷⁰ and Odense near the

¹⁶⁷ In Britain, surgeons were not as eager to take up radium therapy, as the Copenhagen physicians. In the 1920's the Medical Research Committee had to work hard to popularise the treatment as an alternative to surgery. The surgeons were reluctant to take up the treatment while the lay public demanded it be more widely used, see Cantor, D. (1989). "The MRC's Support for Experimental Radiology during Inter-war Years". Historical Perspectives on the Role of the MRC: Essays in the History of the Medical Research Council of the United Kingdom and Its Predecessor, the Medical Research Committee, 1913-1953. J. Austoker and L. Bryder. Oxford, Oxford University Press: 181-204, p. 186-188. On radium therapy and radiology in Britain and France, see: Murphy, C. C. S. (1989). "From Friedenheim to Hospice: A century of cancer hospitals". The Hospital in History. L. Granshaw and R. Porter. New York, Routledge: 221-241, Cantor, D. (1989). "The MRC's Support for Experimental Radiology during Inter-war Years". Historical Perspectives on the Role of the MRC: Essays in the History of the Medical Research Council of the United Kingdom and Its Predecessor, the Medical Research Committee, 1913-1953. J. Austoker and L. Bryder. Oxford, Oxford University Press: 181-204, Pinell, P. (2002). The Fight against Cancer: France 1890-1940. London, Routledge.

¹⁶⁸ Rud, E. (1937). Radiumfondet og Landsforeningen til Kræftens Bekæmpelse 1912-1937. København, Egmont H. Petersens Kgl. Hof-Bogtrykkeri, p. 17.

¹⁶⁹ Bühring, O., T. Øyan, et al., Eds. (2003). 75 år med kræftsagen - Kræftens Bekæmpelse, Kræftens Bekæmpelse, p. 18.

¹⁷⁰ For more on the Radium Station in Aarhus, see: Espersen, B. T. and A.-L. Roager (2008). Det vidunderlige stof, Aarhus Universitetsforlag

The Cancer Centre That Never Was

large hospitals of these cities¹⁷¹. The Fund thus provided the organisational settings for the development of cancer therapy in Denmark.¹⁷²

¹⁷¹ Rud, E. (1937). Radiumfondet og Landsforeningen til Kræftens Bekæmpelse 1912-1937. København, Egmont H. Petersens Kgl. Hof-Bogtrykkeri, p. 20. The scarcity of radium made it necessary to place the radium centres in strategic places "covering" most of the country. The amount of 125 mg of radium purchased by the Danish fund 1912-14 should be seen in the light of the fact that the predominant type of radium treatment – in the form of radium salt (eg. radium sulphate) in metal tubes or needles inserted directly into the tumour – required a minimum content of 1 mg pr. unit (according to Pinell, P. (2002). The Fight against Cancer: France 1890-1940. London, Routledge, p. 121, and Marke, A. W. and P. Raunkjær, Eds. (1939). Den Lille Salmonsens, 9, København, J. H. Schultz, vol. 9, p. 662). The radium could be reused again and again as the substance's half-life is approximately 1620 years. According to a Danish encyclopaedia from 1939, the price of 1 mg of radium initially was 500 DKK, but the price had been reduced to 75 DKK/mg by 1938, Marke, A. W. and P. Raunkjær, Eds. (1939). Den Lille Salmonsens, 9, København, J. H. Schultz, vol 9, p. 663. According to the same encyclopaedia, the supply of radium at the three Danish radium stations increased to 6,066 grams in 1938 (Marke, A. W. and P. Raunkjær, Eds. (1939). Den Lille Salmonsens, 7, København, J. H. Schultz, vol. 7, p. 399), which can be compared to the 9,5 grams of radium purchased by the American National Advisory Cancer Council in 1938 to loan to all the nations hospitals. At that time, only the Roswell Park Memorial Institute in Buffalo, New York, had a supply of its own. Breslow, L., D. Wilner, et al. (1977). A History of Cancer Control in the United States, with Emphasis on the Period 1946-1971. Bethesda, Division for Cancer Control and Rehabilitation, National Cancer Institute, vol. 2., p. 516. This indicates that radium treatment was very popular in Denmark, and as mentioned above, the Danish physicians of the Cancer Committee had at an earlier point in history been more eager to implement the treatment modality than their British colleagues.

¹⁷² In Britain, a Radium Trust and a Radium Commission were established in 1929 by the government and a range of voluntary organisations for the purchase and distribution of radium to treatment facilities in a research scheme to develop cancer treatment. The Commission used the radium supplied by the Fund to reshape cancer services in the country inasmuch as the hospitals that wanted the commission's Radium were encouraged to adopt certain standards of therapeutic practice. In the US, radium was purchased by a diverse range of organisations and individuals, and this resulted in a much more heterogeneous development of radiation therapy practices at multiple different institutions. See, Cantor, D. (2007). "Introduction: Cancer Control and Prevention in the Twentieth Century." Bulletin of the History of Medicine 81: 1-38, p. 13-14, and Cantor, D. (1989). "The MRC's Support for Experimental Radiology during Inter-war Years". Historical Perspectives on the Role of the MRC: Essays in the History of the Medical Research Council of the United Kingdom and Its Predecessor, the Medical Research Committee, 1913-1953. J. Austoker and L. Bryder. Oxford, Oxford University Press: 181-204 for a more detailed history of the support of British experimental radiology in the interwar years.

It is noticeable that British radiation therapy was mainly developed at the general hospitals after World War I – and not at the cancer hospitals which the MRC considered too small to give radium because they were in danger of under-using the expensive substance. The cancer hospitals were thus excluded from the MRC research scheme for the development of cancer treatments. By World War II, almost every cancer hospital had lost their special designations and they were engulfed by the larger general hospitals. With the emergence of the new chemotherapy in cancer treatment, cancer patients were now located at the general hospitals where a *team* of surgeons, physicians, and radiotherapists could develop appropriate courses of treatment for them. See, Murphy, C. C. S. (1989). "From Friedenheim to Hospice: A century of cancer hospitals". The Hospital in History. L. Granshaw and R. Porter. New York, Routledge: 221-241, pp. 231-234.

In France, the aim of the anti-cancer movement was to establish a network of specialised centres in the treatment of cancer. The idea was to bring together various specialised expertise within the fields of cancer diagnosis and treatment under the same roof in cancer centres which was intended to be the basic structure of an institutional anti-cancer apparatus. Governmental agencies initiated the creation of the centre-network that was designed to ensure a high standard of e.g. the new radiation therapies as performed by specialists only. However, some specialists believed that the idea of specialist treatment centres was almost too popular because a high number of official and "unofficial" centres were created in too little time without the necessary equipment and qualified manpower, and the plan for standardized professional treatment was diluted and subject to power struggles between radiotherapists and clinical surgeons who insisted on the superiority of their particular type of treatment. See, Pinell, P. (1991). "Cancer Policy and the Health System in France: "Big Medicine" Challenges the Conception and Organization of Medical Practice." Social History of Science 4(1): 75-101, 79-84. Pinell, P. (2002). The Fight against Cancer: France 1890-1940. London, Routledge, p. 72 et passim.

The Cancer Centre That Never Was

Numerous cancer patients sought help at the cancer stations, but there were far from enough beds, let alone radium, to give proper treatment to them all. Money was short until the government infused financial aid into the Fund in 1921. In addition, a private national collection yielded enough money to buy more radium, and a few years later the government promised to make up half of the running cost deficit of the stations, provided it would not exceed 25,000 DKK per year¹⁷³. The Radium Fund had to rely on the steady inflow of private gifts and interests of capital to cover the second half of the deficit.

In essence, the Danish Government and Parliament had not formulated a cancer control policy or program as seen in other countries¹⁷⁴ by the end of World War I, and although the Cancer Committee acknowledged the importance of early diagnosis in the treatment of cancer, no efforts were made to educate the public on the physical signs of cancer¹⁷⁵. Cancer control, it would seem, rested entirely on treatment modalities, and the scarce (private) resources were invested accordingly. The untenable financial situation for both the Radium Fund and the Cancer Committee left only little room for the support of experimental and clinical cancer *research*, too, and the organisations were not able to thrive in the existing institutional matrix. At least not separately competing for the public's attention and benevolence. While e.g. Britain was about to establish research laboratories in connection with its radium treatment centres (in order to scientifically determine the most suitable radium dose, exposition duration, and biological effects of radium)¹⁷⁶, the Radium Fund could not afford the scientific personnel and laboratory space needed for such activities. The Danish Cancer Committee had similar financial

¹⁷³ Rud, E. (1937). Radiumfondet og Landsforeningen til Kræftens Bekæmpelse 1912-1937. København, Egmont H. Petersens Kgl. Hof-Bogtrykkeri, p. 22.

¹⁷⁴ E.g. in France, where the government initiated programs in early detection and treatment and established a network of cancer treatment centres as the institutional settings for these programs, see Pinell (1991). In Canada, cancer control programs were also initiated. For more on this, see: Hayter, C. R. (2005). An Element of Hope: Radium and the Response to Cancer in Canada. Montreal, McGill-Queen's University Press.

¹⁷⁵ Public education was a much more important part of cancer control in the US, see Breslow, L., D. Wilner, et al. (1977). A History of Cancer Control in the United States, with Emphasis on the Period 1946-1971. Bethesda, Division for Cancer Control and Rehabilitation, National Cancer Institute, Patterson, J. T. (1987). The Dread Disease: Cancer and Modern American Culture. Cambridge, Harvard University Press, Lerner, B. H. (2001). The Breast Cancer Wars. Fear, Hope and the Pursuit of a cure in the Twentieth Century America, Oxford University Press. In Britain, cancer education was given a *low* priority until the 1960s, as the country's cancer agencies feared that public education might make people worry for no reason and consult their private doctors too often with trivial complaints, see: Cantor, D. (2007). "Introduction: Cancer Control and Prevention in the Twentieth Century." Bulletin of the History of Medicine **81**: 1-38, pp. 9, 11.

¹⁷⁶ See Cantor, D. (1989). "The MRC's Support for Experimental Radiology during Inter-war Years". Historical Perspectives on the Role of the MRC: Essays in the History of the Medical Research Council of the United Kingdom and Its Predecessor, the Medical Research Committee, 1913-1953. J. Austoker and L. Bryder. Oxford, Oxford University Press: 181-204, p. 190-191.

The Cancer Centre That Never Was

problems and it has been suggested that its lack of fundraising abilities and its elitist nature had rendered the committee without much political and financial impact¹⁷⁷.

In other words, once the cancer cause became a public cause the elitist nature and professional logics of the Cancer Committee no longer worked as a power conservation mechanism in accordance with public doxa and informal institutional matrices. This had only been possible when cancer control was an elitist medical activity in its own closes, academic realm or field. Once the matter needed public and political support, the elitist habitus and logics of the medical professionals worked against the Cancer Committee, as the “game” was now played in a different arena in which doxa favoured democratic and political power of government rather than physicians. The Committee simply did not play well into the institutional matrix as the broadly scoped and popular Tuberculosis Society had managed to do. They had created a people’s movement.

Although the Danish cancer organisations had not succeeded in making the State take over the running costs of the radium stations like the tuberculosis movement had managed to do with the tuberculosis sanatoriums, and even though state funding for medicine and new buildings seemed to be scarce all over, a series of events gave rise to the establishment of new institutes for scientific and medical research that would positively affect the Danish science, medicine and cancer efforts. In the 1920s, a series of Copenhagen scientists received the coveted Nobel prize which attracted a lot of international attention to the Danish capitol. In 1920, the Copenhagen University physiologist August Krogh was awarded the prize for his work on capillary motor regulation, in 1922 the prominent theoretical physicist Niels Bohr was awarded the prize for his groundbreaking model of the atom, and in 1926 the physician and university professor in pathological anatomy Johannes Fibiger received the prize for his cancer transplantation experiments¹⁷⁸. The awards made Copenhagen a scientific hotspot that attracted many international guest researchers, e.g. from the US, but due to the lack of funds for investment in e.g. laboratory facilities, the university and hospitals, the conditions for the guests’ stays were not optimal¹⁷⁹.

¹⁷⁷ Zachariae, F. (1978). "Kræftens Bekæmpelse 50 år." *Ugeskrift for læger* **140**(43): 2666-2667, p. 2666.

¹⁷⁸ For more on the Danish Nobel Laureates and their work, see: Nielsen, H. and K. Nielsen (2001). *Nabo til Nobel - Historien om tretten danske Nobelpriser*. Gylding, Aarhus university Press.

¹⁷⁹ Jacobsen, K. and K. Larsen (2007). *Ve og Velfærd - Læger, sundhed og samfund gennem 200 år*. København, Lindhardt og Ringhof, p. 213.

The Cancer Centre That Never Was

The American Rockefeller Foundation noted this and opted to invest in the modernisation of the Copenhagen facilities under certain conditions. The Foundation found that the Medical Faculty and the teaching hospitals lacked the latest specialities and theoretical disciplines such as biochemistry and other natural science disciplines, and that professor Krogh's specialty of physiology would benefit from moving into new and better buildings with modern laboratory facilities alongside the new disciplines¹⁸⁰. In 1924, this led to the Rockefeller-funded establishment of a new building for the Medical Faculty – the Rockefeller complex¹⁸¹. But despite the generous contributions from the American foundation to modernise Danish medicine, there was still a pressing need for more funds to support the fight against diseases; be that through treatment modalities or through research into the diseases' causes, as the experimental approach required increasingly more expensive apparatus and space, and the State was gradually making budget cuts through a reduction of its contribution to the sick insurance associations. The need for funds was especially pressing for movements against diseases that did not fall under the medical profession's specialities... such as cancer.

In 1928, the Cancer Committee thus recognised that there was an immediate need for a reorganisation of the country's efforts to control cancer¹⁸². Up to this point, the Cancer Committee had been an association of medical professionals only, but its board now felt that the time was ripe for including lay representation as seen in the versatile cancer organisations in the US¹⁸³. In October that year, the Danish Cancer Committee and the Radium Fund fused into *The Danish Cancer Society*¹⁸⁴. The fusion of the two independent organisations with different statutes and managements was rather complicated inasmuch as they both had to be considered in the making of the organisational set-up of the new society which was given a president as well as a chairman and a managing director. The central organ of the Danish Cancer Society was a committee consisting of 80 members representing e.g. the Ministries of the Interior and Education, the health authorities, the municipal authorities, the Danish universities, the Danish hospitals, the Danish Medical Association and other medical organisations, the sick-benefit

¹⁸⁰ Ibid., p. 215.

¹⁸¹ Knudsen, H. (2006). "Politik, Penge og Forskningsvilkår". *Viden uden grænser 1920-1970*. H. Nielsen and K. H. Nielsen. Aarhus, Aarhus Universitetsforlag: 323-346, p. 325.

¹⁸² Zachariae, F. (1978). "Kræftens Bekæmpelse 50 år." *Ugeskrift for læger* **140**(43): 2666-2667

¹⁸³ On lay representation in American cancer organisations, see: Rettig, R. E. (1977). *Cancer Crusade*. Princeton, New Jersey, Princeton University Press, who describes the introduction of business leaders in the management of the ASCC (which was later renamed the American Cancer Society) and how this changed the nature and program of the organisation.

¹⁸⁴ Rud, E. (1937). *Radiumfondet og Landsforeningen til Kræftens Bekæmpelse 1912-1937*. København, Egmont H. Petersens Kgl. Hof-Bogtrykkeri, p. 23.

The Cancer Centre That Never Was

associations, the Red Cross, the press, and financial institutions¹⁸⁵. This committee was led by a president and met on a yearly basis to discuss the activities of the Head Board (20 members and a board chairman) which met twice a year to evaluate the activities of yet another central organ – the administrative management. This latter organ was in charge of the everyday management of the Cancer Society. In addition, the society finally responded organisationally to the lack of public education and established a number of regional satellite departments that worked locally to inform the public about cancer and to recruit new members. The purpose of the Cancer Society was thus fourfold:

1. To support the operation of the radium stations and the purchase of radium
2. To support experimental and clinical cancer research
3. To educate the public on cancer
4. To supplement the governmental support for cancer patients in need.¹⁸⁶

The Danish Cancer Society (from now on referred to as the “Society”) campaigned through the radio and its regional departments to recruit members, and by the end of 1928 the new cancer organisation had 26.000 members. The number was to increase considerably during the next couple of years which indicated that the fight against cancer had become a matter of importance to a growing part of the Danish population. In 1934, the Society decided to offer its members free radiation therapy at the radium stations and this was undoubtedly another incitement to join¹⁸⁷. Still, the government had not formulated a cancer policy, and its contribution to the treatment, research and prevention of cancer amounted to less than 20 percent of the total costs¹⁸⁸. The anti-cancer efforts were on private hands, and the Society relied heavily on voluntary contributions from individual citizens to carry the burden.

The lack of success of the movement to make the government assume responsibility for at least some of the pillars of the cancer fight was perhaps surprising, as the government in the mid 1930s prioritised the expansion of the country’s hospital system and increased its support for the municipal and county hospitals that were gradually increasing in numbers and being modernised with new specialities (even in the province), and as they saw an increase in the number of

¹⁸⁵ Ibid., p. 23.

¹⁸⁶ Ibid., p. 24.

¹⁸⁷ Rud, E. (1953). Landsforeningen til Kræftens Bekæmpelse 1928-1953. København, Egmont H. Petersen Kgl. Hof-bogtrykkeri, p. 22.

Bühring, O., T. Øyan, et al., Eds. (2003). 75 år med kræftsagen - Kræftens Bekæmpelse, Kræftens Bekæmpelse, p. 18.

¹⁸⁸ Rud, E. (1937). Radiumfondet og Landsforeningen til Kræftens Bekæmpelse 1912-1937. København, Egmont H. Petersens Kgl. Hof-Bogtrykkeri, p. 30.

physicians wanting to work at hospitals rather than as private practitioners¹⁸⁹. The Medical Faculty experienced capacity problems due to an influx of medical students, and in 1935 a medical faculty at the recently established Aarhus University was set up to take the pressure of the Copenhagen faculty¹⁹⁰. With the 1933 passing of an act of parliament to make membership of sick insurance associations mandatory and paid through taxes, and through the right of private practitioners' right to refer patients to the publicly financed hospitals, it would seem that the entire health care sector was experiencing a massive expansion in terms of new hospitals, specialities, institutes and financing. But even though the government seemed to prioritise this expansion, it did not concern cancer treatment at the radium stations or cancer research, the latter of which was not given high priority by the Society either, in spite of the international attention given to the subject and Fibiger's Nobel prize for transferrable cancer.

This indicated that even in an organisation of medical professionals, research (done by people trained in medicine) was not considered a main pillar of the fight against cancer, and this constituted informal institutions (their taste and preferences) acting against making cancer research a special priority on a state level on a par with the existing disciplines and specialities at the university and the hospitals from which the cancer research problems and methodology stem and in which its practitioners usually worked. In other words, in times of apparently favourable formal institutions to boost "cancer research" and "cancer treatment" as independent scientific disciplines and medical specialities with separate budgets, informal institutions in the form of the conservative traditionalism in the hierarchical medical field acted against such an Lundgrenian "institutionalisation".

2.3 The support of experimental cancer research

The operation of the radium stations and the treatment of cancer patients was undoubtedly the primary objective of the Society, but it did to a lesser extent support cancer *research* in laboratories at the radium stations in Copenhagen and Aarhus, and in the *Laboratory for Pathological Anatomy* at the University of Copenhagen: an atypical laboratory combining research and clinical observations. The research done at the university primarily focused on the mechanisms of carcinogenesis and the histological classification of different types of cancer¹⁹¹.

¹⁸⁹ Jacobsen, K. and K. Larsen (2007). Ve og Velfærd - Læger, sundhed og samfund gennem 200 år. København, Lindhardt og Ringhof, p. 330-332.

¹⁹⁰ Ibid., p. 333-335.

¹⁹¹ Rud, E. (1937). Radiumfondet og Landsforeningen til Kræftens Bekæmpelse 1912-1937. København, Egmont H. Petersens Kgl. Hof-Bogtrykkeri, p. 69.

The Cancer Centre That Never Was

At the radium stations, on the other hand, researchers investigated the effects and quality of radiation therapy on cancerous tissue. Experimental cancer research was not given high priority at the Copenhagen station until 1937, when the Society opened a new and larger radium station within the *Finsen Institute* – an independent private clinic that had specialised in the radiation treatment of various diseases of the skin¹⁹². The institute was named after the Nobel Laureate Niels Finsen (1860-1904), who offered light therapy to Danish cancer patients in his private clinic at the turn of the 19th century. The institute had traditionally had a mixed reputation amongst the Copenhagen physicians, as it was established in 1896 for private and sick insurance association funds and managed to get state-support for its day-to-day operations, and it was therefore in a position to soak up all private and public funding at the cost of the public health care system in times when political inertia had otherwise made state-support for any modernisation or new construction of hospitals next to impossible¹⁹³. In 1937, the Danish chief of medicine recommended that the Copenhagen Radium Station be placed at this private hospital instead of at the state-owned hospital *Rigshospitalet* (the replacement of Frederiks hospital) and thus away from any association with the Medical Faculty. At the 1937 inauguration of the new radium station, room was made for a laboratory for experimental cancer research but on an entirely *private* initiative and in private buildings.

A few years after, yet another cancer research unit saw the day of light. The foundation of one of Denmark's strongest cancer research traditions, cancer epidemiology, was laid in 1941 as the Society was approached by a few of its own researchers. They argued that the lack of statistical registration of cancer incidences and the limited knowledge about the circumstances under which cancer patients developed the disease had proven to be a major impediment to the progress of experimental cancer research¹⁹⁴. Apart from the early statistical material on the spread of cancer uteri, there had been no cancer surveys in Denmark. In response to this, the Society established an agency to compile statistics on the incidence of cancer in Denmark in 1942¹⁹⁵. It was called the Danish Cancer Registry, and its purpose was to work out reliable data

¹⁹² Rud, E. (1953). *Landsforeningen til Kræftens Bekæmpelse 1928-1953*. København, Egmont H. Petersen Kgl. Hof-bogtrykkeri p. 100.

¹⁹³ Jacobsen, K. and K. Larsen (2007). *Ve og Velfærd - Læger, sundhed og samfund gennem 200 år*. København, Lindhardt og Ringhof, p. 176-177. Also, the institute had from its start had a clearly practical and rather unscientific approach to its practice and treatments; it was not necessary to find out why things worked if they did indeed work.

¹⁹⁴ Rud, E. (1953). *Landsforeningen til Kræftens Bekæmpelse 1928-1953*. København, Egmont H. Petersen Kgl. Hof-bogtrykkeri p. 90.

¹⁹⁵ According to Proctor, R. N. (1999). *The Nazi War on Cancer*. Princeton, Princeton University Press, p. 112-113, and Patterson, J. T. (1987). *The Dread Disease: Cancer and Modern American Culture*. Cambridge, Harvard University Press, p. 78, the science of cancer epidemiology developed from the 19th century from being scattered

The Cancer Centre That Never Was

about the morbidity and occurrence of cancer and to set up a registry of cancer patients. The plan was to analyse this material to identify correlations between specific types of cancer and e.g. the patient's occupation, diet, age, gender, environment etc¹⁹⁶. The conclusions from such surveys were priceless to basic cancer research as well as to the clinicians who reported the statistical data to the registry and in turn received a stronger basis for the assessment of their treatment modalities. The registry received data about all cancer incidences and cancer-related death from general practitioners and hospitals.

It was a unique Danish collaboration between the publicly and the privately operated parts of the health sector. The statistical material was considered to be reliable and useful due to the linkage of data from the very homogenous public health sector to the private registry¹⁹⁷. At the time, very little was known about the occurrence of cancer in Denmark, or anywhere else for that matter, and the Danish initiative thus received some attention from abroad¹⁹⁸. Because of the registry, cancer epidemiology emerged as a strong research tradition in Denmark, and after a few years of existence, the space-consuming activities of the registry had to be moved from its interim premises in an abandoned World War I-hut to the top floor of the new Copenhagen Radium Station¹⁹⁹. The Society's organisational response to the lack of reliable cancer statistics

mortality statistics and assumptions about links between cancers and certain substances such as e.g. mine dust based on small and unreliable samples and seldom controlled for the age of the population to being a more statistically founded science requiring large numbers of cases before concluding such links in the 1950s. Initially, cancer epidemiology was not considered by the medical profession to be able to make substantial contributions to the pathogenesis of cancer, see Patterson, J. T. (1987). The Dread Disease: Cancer and Modern American Culture. Cambridge, Harvard University Press, p. 78. However, in the early 20th century US and interwar Germany, cancer epidemiologists were making studies on the cancerogenic effect of smoking and asbestos. However, not much attention was given to these studies and the theory they presented, until in the 1940s when American and British groups of statisticians and physicians conducted separate and thorough studies on the alleged link between cancer and smoking. The studies resulted in publications in 1950s and more cancer epidemiological studies followed, see Patterson, J. T. (1987). The Dread Disease: Cancer and Modern American Culture. Cambridge, Harvard University Press, p. 208-209. According to Cairns, J. (1978). Cancer: Science and Society, W.H. Freeman and Company, p. 161, it was not until the 1970s that the field of cancer epidemiology attracted greater attention than ever in the US.

¹⁹⁶ Bühring, O., T. Øyan, et al., Eds. (2003). 75 år med kræftsagen - Kræftens Bekæmpelse, Kræftens Bekæmpelse, p. 25.

¹⁹⁷ Storm, H. H., E. V. Michelsen, et al. (1997). "The Danish Cancer Registry - history, content, quality and use." Danish Medical Bulletin 44(5): 535-539, p. 535. In 1968, the data was linked with the state-managed Central Population Registry (CPR) which made the registry even better. The Registry was headed by the cancer epidemiologist and pathologist Dr. Johannes Clemmesen, who studied the social, geographical, topographical and age distribution of cancers in Denmark, see: Clemmesen, J. and A. Nielsen (1951). "The social distribution of cancer in Copenhagen, 1943-1947." British Journal of Cancer 5(2): 159-171, Clemmesen, J., T. Busk, et al. (1952). "The topographical distribution of leukemia and Hodgkin's disease in Denmark 1942-46." ACTA RADIOLOGICA 37(3-4): 223-230, Clemmesen, J., T. Busk, et al. (1948). "The age distribution of malignant diseases in Denmark." ACTA RADIOLOGICA 30: 9-16.

¹⁹⁸ Bühring, O., T. Øyan, et al., Eds. (2003). 75 år med kræftsagen - Kræftens Bekæmpelse, Kræftens Bekæmpelse, p. 25.

¹⁹⁹ Rud, E. (1953). Landsforeningen til Kræftens Bekæmpelse 1928-1953. København, Egmont H. Petersen Kgl. Hof-bogtrykkeri, p. 92.

The Cancer Centre That Never Was

– the establishment of the Danish Cancer Registry – introduced cancer epidemiology as a new weapon in the Danish war on cancer. From an institutional perspective, this change in relative prices gave rise to new collaborations between private and public organisations in the Danish cancer field. The collaborating organisations were trying to utilise the opportunities in the existing institutional matrix to both survive and serve their individual purpose; the private being utilising all possible resources to fight cancer in specific, the public being utilising the allocated resources to provide more health care in general. Because the new collaboration allowed the organisations to serve their new common goal without sacrificing their individual purposes, the collaboration was possible within the existing institutional framework. It was a modest start to a public-private effort to control cancer but a start nevertheless.

Despite the modest housing and laboratory conditions at the radium stations, the space consuming cancer research activities became a high priority for the Society during the 1940s. The Society eventually supported cancer research in labs scattered all over the country, and a need to coordinate these scientific contributions slowly emerged. The idea behind the establishment of the new radium station in Copenhagen was to make room for a laboratory for experimental cancer research and to bridge the gap between bench and bedside by placing this lab near the clinic²⁰⁰. This priority was reflected in the job descriptions of Dr. Julius Engelbreth-Holm, when the Danish Cancer Society appointed him head of the cancer research lab and – at the same time – prosecutor at the radium station and at the Finsen Institute in 1938.

At the time of his appointment, Engelbreth-Holm was already an internationally renowned cancer researcher. At the Laboratory for Pathological Anatomy at Copenhagen University he had worked with Dr. Oluf Thomsen on the transplantable chicken leucosis and the relation of this disease to the virally induced chicken sarcoma²⁰¹. Their publications attracted much attention, and Engelbreth-Holm was thus much respected when he started working for the Society. From the very beginning, he dreamed of a larger and independent cancer research centre in Denmark and quickly made plans to expand his modest laboratory facilities at the radium station. As will be clear in the following, his dream stemmed from a stay in the US. But while the Society was not opposed to this dream, formal constraints such as the outbreak of World War II and the German occupation of Denmark did put it on hold. When Engelbreth-Holm was appointed professor of pathological anatomy at the university during this period, he

²⁰⁰ Ibid. p. 100.

²⁰¹ Snorrason, E. (1980). "Julius Engelsbreth-Holm". Dansk Biografisk Leksikon, Nordisk Forlag A/S, p. 185.

resigned from his position at the Danish Cancer Society and any plans of expanding the private lab at the radium station were permanently abandoned²⁰².

2.4 The idea of the cancer centre

The idea of the cancer centre in itself was not abandoned, however. As it turned out, the medical breakthroughs of other countries during World War II had illustrated new efficient ways of organising and conducting medicine which was about to inspire both Danish medical professionals and politicians to employ new tools in the fight against cancer: the integration of research and treatment.

The war had demonstrated beyond doubt the applicability of science. In 1945, US military doctors published their collective findings that the mortality rate of wounded and sick soldiers was diminished compared to that of World War I, and that this progress was most likely due to better acute treatment modalities and the availability of antibacterial substances such as sulpha compounds, penicillin, and also plasma and mobile hospital facilities etc²⁰³. Not only did this bear witness to the benefits of the aforementioned medical breakthroughs, it also evidenced the effectiveness of a deliberate policy of supporting basic research in the hope of applying it in (military) medicine and industry. The heavy state funding and mobilisation of technicians, scientists and medical researchers in many countries had led to the practical military and industrial use of basic scientific knowledge: the industrial mass production of penicillin, and of course the atomic bomb²⁰⁴.

The idea of industrial application of technological and basic scientific research was far from new, though. At the beginning of the 20th century, Germany and the U.S were at the forefront of this development. In the US, industrial patrons such as the Rockefeller Foundation established a close connection between industry and science in the country²⁰⁵. In Germany, the government-

²⁰² Rud, E. (1953). Landsforeningen til Kræftens Bekæmpelse 1928-1953. København, Egmont H. Petersen Kgl. Hof-bogtrykkeri, p. 101.

²⁰³ Jacobsen, K. and K. Larsen (2007). Ve og Velfærd - Læger, sundhed og samfund gennem 200 år. København, Lindhardt og Ringhof, p. 402.

²⁰⁴ On mass production of penicillin: Porter, R. (2003). Medicinens Historie. København, Rosinante Paperbacks, p. 457.

On the development of the atomic bomb and the use of atomic energy for military purposes as described in the so-called "Smyth report", see Smyth, H. D. (1945). Atomic Energy for Military Purposes; the Official Report on the Development of the Atomic Bomb under the Auspices of the United States Government, 1940-1945. Princeton, Princeton: Princeton University Press.

²⁰⁵ An example of this is the Rockefeller Foundations support of and influence on and the emergence of molecular biology in the 1930's, See, Kay, L. E. (1993). The Molecular Vision of Life Caltech, The Rockefeller Foundation and The Rise of the New Biology. New York, Oxford University Press.

The Cancer Centre That Never Was

sponsored Kaiser Wilhelm Institutes were established in 1911, and these research institutes allowed researchers to dedicate themselves completely to a certain problem or research area of choice, with the explicit goal that this work might in time find some mode of practical application for the German industry²⁰⁶. In this way, the state provided fruitful formal institutions for its researchers in the form of good financial and working conditions, and the promotion of both scientific autonomy and the need for industrial applicability. When the Nazis gained power in Germany, they were in a position to develop a strong tradition of organising science for national purposes. In England, the importance of applicable research was stressed in 1939, when X-ray crystallographer J.D. Bernal published his book *The Social Function of Science*. In this book, Bernal argued that government support and planning of scientific research would be the best means of improving the conditions of human life.

All in all, this take on science organisation was highly prevalent and took on similar forms in many other countries. However, World War II specifically illustrated the effectiveness of such strategies as exemplified through the famous Manhattan Project. American engineer and science manager Vannevar Bush was one of the leading political forces behind the development of the atomic bomb, but as a result of the success of the war time research strategy, he began to fear for the future of basic research in the country. If science was constrained by the demands of applicability, mankind would risk losing out on the “fluke” discoveries that emerged from freewheeling basic research. In his 1945 report *Science – The Endless Frontier*, he suggested another type of science policy that assured the autonomy of science by bidding the grant-awarding authorities to allocate vast amounts of money to basic research without any special requirements or conditions²⁰⁷. The idea was often referred to as “science push”, because it implied that scientific progress opened new vistas for society and pushed it in certain directions rather than the other way around.

All of the abovementioned ideas on the management and organisation of science led to vivid discussions in Denmark in the 1940s and 1950s, where a new generation of researchers demanded better funding and working conditions for Danish science. The Danish government had not been accustomed to allocating large public funds for basic research. The publicly operated universities were particularly accustomed to modest conditions, and like anyone else in

²⁰⁶ On the Kaiser Wilhelm Institutes, see McAuley, J., J. Duberley, et al. (2007). Organization theory - Challenges and Perspectives. Harlow, Pearson Education Limited.

²⁰⁷ For more on this, see Bush’s five fundamental principles for government support programs for research and education: Bush, V. (1945). Science - The Endless Frontier, The United States' Government Printing Office, p. 26.

The Cancer Centre That Never Was

the research community, university professors had to rely on the financial support from private organisations such as the Danish Carlsberg Foundation and the American Rockefeller Foundation²⁰⁸. As war time inflation had taken its toll on the Carlsberg Foundation and rumours had it that the Rockefeller Foundation was planning to support war-ravaged countries only (and therefore not Denmark), the Danish research community worried that something had to be done to prevent Danish science from stagnating²⁰⁹. Scientists argued that there was an urgent need for funds and better working facilities, and it was their opinion that the government needed to provide these²¹⁰. That is, the government should define and commit to formal institutions in favour of research.

Although Denmark, compared to the rest of Scandinavia, did not rush to establish research councils in order to support *basic* research through grants-in-aid, the Danish government *did* create a formal institution by establishing an agricultural research council in 1946 with the deliberate purpose of solving the current crisis of Danish agriculture that had suffered due to its lack of ability to compete on the international market²¹¹. Generally speaking, though, most basic researchers tended to favour Bush's "science push" model for the organisation of science, and used the press to propagandise and attack the government's short-term research policy that had favoured applied research only²¹². The tone of the discussions was fierce and it was within this context that the most persistent idea concerning the organisation of Danish cancer research was hatched: *a Danish comprehensive cancer centre*.

The political discussions on the future of Danish science gave Dr. Albert Fischer the opportunity to present his vision for *cancer research*. Fischer's interest in cancer started in the early 1920s, when he studied under Alex Carrel at the *Rockefeller Institute* in New York. Here he was taught a special technique for the in vitro cultivation of epithelial cells. He quickly became an expert on the subject and extended his interests to include cultivation of cancer cells as well. In 1926 his technical expertise helped him get a position as head of a guest department at the *Kaiser*

²⁰⁸ On the Rockefeller Foundation, see: Kay, L. E. (1993). *The Molecular Vision of Life Caltech, The Rockefeller Foundation and The Rise of the New Biology*. New York, Oxford University Press.

²⁰⁹ Knudsen, H. (2006). "Politik, Penge og Forskningsvilkår". *Viden uden grænser 1920-1970*. H. Nielsen and K. H. Nielsen. Aarhus, Aarhus Universitetsforlag: 323-346, p. 327 & 335.

²¹⁰ Knudsen, H. (2005). Konsensus og konflikt - orgnaiseringen af den tekniske forskning i Danmark 1900-1960. *The Department for the History of Science*. Århus, University of Aarhus: 401. p. 15.

²¹¹ Knudsen, H. (2006). "Politik, Penge og Forskningsvilkår". *Viden uden grænser 1920-1970*. H. Nielsen and K. H. Nielsen. Aarhus, Aarhus Universitetsforlag: 323-346, p. 331.

²¹² Ibid., p. 333-335.

The Cancer Centre That Never Was

Wilhelm Institute in Berlin Dahlem²¹³. Six years later he was made director of the newly established *Carlsberg Biological Institute* in Copenhagen²¹⁴. In a newspaper article from August 28th 1945, Fischer stated that any real progress in the “fight against cancer” would come from organisational and scientific initiatives that would use the American Manhattan Project as a template²¹⁵:

The first thing that needs to be done in order to make this dream come true is to give the scientists the right working conditions. A model research institute with all needed apparatus and funding in place should be established in a country which has no prospects of being a battleground of war. It is not my intention that this institute should be used for a specific project or by a specific group of researchers. It is to be at disposal when any urgent problem needs to be solved, and the best brains of the world within the specific field of this problem should gather there and join forces in finding a solution to it. This is what the people behind the atomic bombs did. (...) The same should be done within the medical sciences, and cancer poses a well-defined international problem that everybody has an interest in solving. (...) Naturally, it would be costly, but I believe that the money spent on this collaborative action would yield better results than the money spent on the scattered cancer research worldwide today. I wonder if it would not be better to put this money in an international fund to support the collaboration between the best of the best.²¹⁶

Fischer proposed an international institute for “problem-solving” research. His time at the Kaiser Wilhelm Institute had certainly not been in vain, as he had apparently adopted and developed the science policy behind the German research establishment. In doing so, he came to represent a mixed stance in the ongoing debate on Danish research policy: He tried to support both the mission-oriented perspective from the Manhattan project but at the same time the basic cell biologist in him supported elements of the “science-push” model, as will be elaborated on below.

Five months later, the previously mentioned Professor Engelbreth-Holm indirectly commented on Fischer’s idea in the press by presenting an alternative vision for the future of Danish cancer research. He, too, had been abroad (the US) and was convinced that the conditions for Danish cancer research had to be dramatically improved. Otherwise, Denmark would be left behind the international developments within cancer research and treatment. And it would not be

²¹³ Snorrason, E. (1980). "Julius Engelsbreth-Holm". *Dansk Biografisk Leksikon*, Nordisk Forlag A/S; Snorrason, E. and O. Thomsen (1980). "Albert Fischer". *Dansk Biografisk Leksikon*, København, Nordisk Forlag A/S.

²¹⁴ Linderstrøm-Lang, K. (1957). "Albert Fischer". *Det Kongelige Videnskabernes Selskab- Oversigt over Selskabets Virksomhed 1956-57*, Ejnar Munksgaard, p. 74.

²¹⁵ Fischer was far from the first or the last to think along these lines. The idea of organising (cancer) research by taking cues from the Manhattan Project became a powerful trend in the US, see Breslow, L., D. Wilner, et al. (1977). *A History of Cancer Control in the United States, with Emphasis on the Period 1946-1971*. Bethesda, Division for Cancer Control and Rehabilitation, National Cancer Institute, vol. 2, p. 530.

²¹⁶ Olaf-Hansen, E. (1945) "Kræftbekæmpelse efter Atombombe-Princippet" *Politiken* København 26.08.1945

The Cancer Centre That Never Was

acceptable for Denmark to sit on the periphery and do nothing but await results from abroad. In the US, cancer agencies had struggled to reorganise cancer services by the means of a patient referral system, through which the individual cancer patient could be referred from his family doctor to local, regional or even national specialist cancer hospitals²¹⁷. However, the idea of specialist cancer centres was not always welcomed by all (especially not by private practitioners), and this led to disagreement on how to organise cancer services – e.g. new autonomous cancer centres vs. cancer clinics in existing hospitals²¹⁸. In the 1940s, support for the experimental research into the aetiology of cancer and potential chemotherapy compounds exploded, and hospital specialist cancer units established with the original purpose to provide cancer care were now made into cancer research centres, since their large populations of patients and teams of experts made them ideal settings for therapeutic trials²¹⁹. The multi-disciplinarity of these centres dedicated entirely to cancer rang well with Engelbreth-Holm who argued that the field of cancer research was expanding so fast that the individual cancer researcher could no longer master it all, and he therefore pleaded for a more “rational” organisation of cancer research in Denmark:

For the moment, cancer research is done at several hospitals and laboratories in the sense that each researcher works on his special task without much collaboration with his colleagues. (...) But these efforts are not, and cannot, be adequately coordinated. (...). Some are more or less hopelessly struggling to keep it all together – a task made more difficult each year – for nobody masters all the disciplines of clinical cancer research, pathology, biology, chemistry, physics, and mathematics that make up modern cancer research. Then what does it take? It takes a research institute that collaborates with a cancer hospital – a research institution that consists of several departments for each of the aforementioned disciplines – and which is led by different experts. It takes collaboration, or “team-work”, between these departments so that they will supplement and learn from each other. They know this in the US and they have established The National Cancer Institute²²⁰, in which the principle of team-work is consistent. This principle and the unlimited flow of resources led to the utilisation of atomic energy. One cannot expect the same results in cancer research, as the cancer problem is not nearly as theoretically clarified, but I have no doubt that a broad and coordinated offensive against cancer will yield far greater results than the single and isolated studies ever will.²²¹

²¹⁷ Cantor, D. (2007). "Introduction: Cancer Control and Prevention in the Twentieth Century." Bulletin of the History of Medicine **81**: 1-38, p. 6.

²¹⁸ Ibid. p. 7.

²¹⁹ Ibid. p. 8.

²²⁰ The National Cancer Institute (NCI) was established in 1937 as part of the National Institutes of Health (NIH) and is the Federal Government's principal agency for cancer research and training. On the legislative history of the National Cancer Institute, see Breslow, L., D. Wilner, et al. (1977). A History of Cancer Control in the United States, with Emphasis on the Period 1946-1971. Bethesda, Division for Cancer Control and Rehabilitation, National Cancer Institute, vol. 2. p. 507-513.

²²¹ Engelbreth-Holm, J. (1946) "Kræftforskningen i Fremtiden" Berlingske Aftenavis København 11.01.1946.

The Cancer Centre That Never Was

Engelbreth-Holm believed that scientific progress in the fight against cancer would stem from the synergy effect of placing different disciplines of basic and clinical cancer research under the same roof. In this way, he stressed the importance of basic cancer research to cancer treatment and the collaboration between clinicians and researchers. The key words were *teamwork*, *centralisation* and *coordination*, but in this type of national cancer centre the researchers were not forced to solve a narrow and pre-defined problem, although the work had to be relevant to the study of cancer. Engelbreth-Holm wanted to establish a two-way communication between bench and bedside. He felt that the study of cancer required intense co-operation between researchers of clinical, experimental, and epidemiological research and that the establishment of a cancer research centre at the *Finsen Institute* would provide the ideal setting for such activities. Engelbreth-Holm wanted a *national* wide-ranging cancer research institute²²². Fischer, on the other hand, wanted to place an *international* institute in a country that was not likely to be ravaged by war which would impede the scientific work at a centre²²³. The following debate between the two was therefore characterised by their individual attempts to discuss the concept of a centre from either a national or an international perspective and scale. This meant that the two sometimes were not always so much commenting on the other's proposal as much as they were advocating their own.

During the process of this debate, Engelbreth-Holm commented on Fischer's proposal to place a centre in a country not likely to be ravaged by war, as he argued that he feared such a country might not even exist and that "it would not be practical to place an institute far from the cultural centres of the world"²²⁴, thereby trying to make the debate about a national cancer centre. Fischer returned fire by dismissing the idea of a new *national* cancer research institute all together. He worried that a national institute would force the country to tie up existing funds for cancer research, in contrast to an international centre. He therefore presented an alternative to what he feared would be a monopolising cancer institute: a network of collaborating laboratories and research institutes endowed with an increased level of public, private, and industrial support²²⁵. To Fischer, it would be far more suitable for a small country like Denmark to adopt this mode of organisation rather than imitating the structures of the much larger and wealthier US.

²²² The term "comprehensive" which I later use to designate the type of centre proposed by Engelbreth-Holm was first coined by the NCI after the passing of the National Cancer Act of 1971.

²²³ Olaf-Hansen, E. (1945) "Kræftbekæmpelse efter Atombombe-Princippet" *Politiken* København 26.08.1945.

²²⁴ Engelbreth-Holm, J. (1946) "Dansk Kræftforskning" *Berlingske Aftenavis* København 21.02.1946.

²²⁵ Fischer, A. (1946) "Dansk Kræftforskning" *Berlingske Aftensavis* København 21.01.1946

The Cancer Centre That Never Was

In this way, Engelbreth-Holm had managed to force Fischer into discussing potential cancer institutes within a national framework. However, Engelbreth-Holm claimed not to understand the criticism Fischer gave his idea. He did not believe that a national research institute would tie up all funds available for cancer research and thereby monopolise the field. He had not proposed a zero-sum game in which the total of all gains and losses was zero. On the contrary, his centre was to be backed by *additional* governmental subsidies and private contributions, thus making cancer research a high priority of the state. Also, he rejected Fischer's network-model as impractical. In practice, both models would need a powerful director to coordinate research efforts and identify new interesting research problems. Engelbreth-Holm simply did not think that this would be feasible within Fischer's proposed network of equal and autonomous research institutes. As this model was only a theoretical consolidation of the institutes involved, Engelbreth-Holm argued that it would not improve the everyday working conditions of the researchers who would often be too preoccupied with teaching obligations and administrative tasks to involve themselves in serious inter-mural collaborations²²⁶. This was clearly not the sweeping reform needed to reorganise Danish cancer research. He therefore stood by his idea of a wide-ranging cancer institute where a staff of (mature!) researchers should be freed of such obligatory services.

Engelbreth-Holm pointed to the cancer research laboratory at the *Memorial Hospital* in New York as an example of an interdisciplinary institute²²⁷. This was a research institute consisting of no less than eight departments for experimental cancer biology, biophysics, chemotherapy, protein chemistry, enzyme chemistry, and an animal stable²²⁸. The annual operating costs of this establishment amounted to approximately 500,000 USD. And although this was an impressive amount of money, Engelbreth-Holm argued that it would not be impossible to do something similar in Denmark, although it had to be on a smaller scale. Also, he argued that the pioneering work done at the cancer registry could not be outdone by any foreign institute no matter how much money was put into the effort. In addition to the talent of the country's leading cancer

²²⁶ Engelbreth-Holm, J. (1946) "Dansk Kræftforskning" *Berlingske Aftenavis* København 21.02.1946.

²²⁷ The research laboratory referred to was the Sloan Kettering Institute, established in 1945 by private donations from Alfred P. Sloan Jr. and Charles F. Kettering (Vice-president of the General Motors Corporation). The Institute was dedicated to fostering innovative basic cancer research by applying modern American industrial research techniques. In 1960, the cancer ward at the Memorial Hospital and its Sloan-Kettering Institute were formally joined to become the *Memorial Sloan-Kettering Cancer Center*.

The institute was revered as "state of the art" by American researchers, see Breslow, L., D. Wilner, et al. (1977). *A History of Cancer Control in the United States, with Emphasis on the Period 1946-1971*. Bethesda, Division for Cancer Control and Rehabilitation, National Cancer Institute, vol. 2. p. 537.

²²⁸ Engelbreth-Holm, J. (1946) "Dansk Kræftforskning" *Berlingske Aftenavis* København 21.02.1946.

The Cancer Centre That Never Was

epidemiologists, progress within this field was due to the special uniformity of the Danish hospital system and its collaboration with the Danish Cancer Society. Engelbreth-Holm was even certain that Denmark had the human resources for a similar advance in *other* fields of cancer research: experimental cancer research, pathological anatomy, radiobiology, biophysics and biochemistry²²⁹. All that needed to be done was to provide fitting physical and organisational frames for this work – a national cancer institute²³⁰:

Naturally, the giant American Research Institutes will have certain advantages compared to a Danish one. But in the end, their work will depend on the brains that lead them, and by looking at what Denmark has achieved hitherto in this area it will not be unfair to say that Denmark will have certain opportunities that cannot be outbalanced by dollars. (...) it is of paramount importance to change the current attitude of the grant-awarding authorities. Our current system of isolated institutes, which more or less are dedicated to other activities than cancer research, cannot compete with these systematised [American] team-works.²³¹

Using Douglass C. North's and Bourdieu's terminologies, the newspaper mediated debate on cancer centres can be explained as follows. The two researchers had knowledge of how the fight against cancer was organised in other countries. That is, they knew of countries whose governments had created more favourable formal institutions for this fight in the form of policies and financial support systems than the Danish government. Therefore the idea of a cancer centre as the organisational means to utilise the institutional latitude was by no means foreign to them, although they each pictured it differently. Promoting such an organisation was a direct challenge to the existing institutional matrix in Denmark; that cancer research was not organised on a national level but rather on smaller independent organisational levels often committed to other research purposes than cancer. According to North, however, radical institutional change can only be brought about by the most powerful organisation in the field (which neither of the two researchers was) or through new power-optimizing alliances. The latter may be the reason why the two researchers chose to publish their thoughts in the

²²⁹ Ibid; Rud, E. (1953). Landsforeningen til Kræftens Bekæmpelse 1928-1953. København, Egmont H. Petersen Kgl. Hof-bogtrykkeri, p. 101.

²³⁰ Engelbreth-Holm hoped that the Danish Government would realise that a national research centre could be established on a modest operating budget of about 300.000 DKK/year. Half of this expense was already being financed by the Danish Cancer Society through its daily running of The Danish Cancer Registry, the Copenhagen Radium Station, and to some extent his own department, which was partly financed by the society, the Government and grants from both American and British cancer funds, see: Engelbreth-Holm, J. (1946) "Dansk Kræftforskning" Berlingske Aftenavis København 21.02.1946.

²³¹ Ibid.

newspapers instead of in a more private/professional forum. An appeal to the newspaper readers to back a cancer centre could be the alliance needed as leverage against the government who had the actual power to change the institutional matrix.

2.5 A clash of the titans?

Fischer's and Engelbreth-Holm's arguments for their different models reflect different types of aims, values and "professional logics" as described in sociologist Pierre Bourdieu's works. Fischer came from a basic research institute and thus assigned a high priority to basic research/science as an *international* strive for a precise understanding of the basic mechanisms of nature and supported the mix of the science push model and the mission-oriented model which he had been acquainted with from the Kaiser Wilhelm Institutes; a place in which scientists were given the means to try to solve specific problems in whatever manner they saw fit (through basic research in the hope of serendipity breakthroughs or through more targeted efforts). To Fischer, cancer was one of the health and social problems that could potentially be solved with the help of such an international institute. But when the clinically orientated Engelbreth-Holm suggested his *national* cancer centre *including* patient treatment – which was a task to be solved *nationally* and *locally* – Fischer suddenly presented a new model for cancer research within a national frame: a network of cancer labs. Fischer's new model did not include cancer clinics, but focused primarily on research into the basic mechanisms of cancer and not on the cancer patients. In this way, he stated that basic scientific disciplines such as cell biology were at the core of cancer research.

The clinician Engelbreth-Holm, on the other hand, assigned a high priority to treating the cancer patients and suggested a national wide-ranging cancer centre encompassing both research and cancer treatment so that the local patients could receive treatment based on the latest scientific knowledge about the biology of cancer. As mentioned above, he used to be affiliated with the Copenhagen Radium Station and the Cancer Society's laboratory for experimental research where this combination of treatment and research had been implemented. His research was thus more clinically orientated than Fischer's basic cell biology, and his model reflects that to him cancer research was a wide research area with basic, epidemiological and clinical aspects, and that cancer treatment and prevention depended heavily on all of these. The two researchers thus disagreed on two central points: on what was at the core of "cancer research" and on what should be included in a cancer institute. Consequently, the bone of content in this stride was officially a matter of research policy: would the best results in the fight against cancer stem from

The Cancer Centre That Never Was

a carefully orchestrated co-ordination of targeted cancer research and treatment – of bench and bedside – or would progress more likely come from the serendipity breakthroughs of a non-cancer-specific cell biology research effort? As it turned out, Engelbreth-Holm's take on this question was more in tune with the zeitgeist and would play well into a new (research) political agenda of the Danish government, as will be elaborated on in the following pages.

Furthermore, when Fischer and Engelbreth-Holm were discussing a cancer institute in a *national* frame, their personal goals and ambitions may have played a role as well. And whereas the research political dimension of their stride would eventually be resolved in favour of Engelbreth-Holm by circumstances the economist Douglass C. North would have called a change of formal institutions, the matter of the two contenders' personal goals and ambitions gave another and sociological dimension to the stride. This meant that there were different reasons as to why one model won out over the other. One reason had to do with research policy, political agendas, and North'ian change of formal institutions. The other, which will be dealt with immediately below, had to do with the social standing – or symbolic capital – of the two contenders striving for optimising their power in a sociological arena – the cancer field – in accordance with the theoretical works of sociologist Pierre Bourdieu.

In this field, Engelbreth-Holm's model deliberately left Fischer out of the loop. Perhaps this is why he criticizes the dangers of monopolisation:

Such an arrangement would make cancer research a privilege, a sort of monopolisation of the work in this country that will hardly be of benefit to the anti-cancer cause. This author has had several peculiar experiences with the former reign of Johannes Fibiger. (...) an increased level of public, private and industrial support for a closer collaboration between Danish institutions is to be preferred.²³²

In contrast to Engelbreth-Holm's centre, a network of equal research labs would give Fischer some say in the decision-making processes and make him and his Carlsberg Biological Institute candidates for the coveted funds for cancer research. By the same token, Engelbreth-Holm's concerns may have been that his idea would not receive backing from the grant-awarding authorities in question, if Fischer and his Carlsberg Biological Institute claimed to do cancer research in an attempt to, so to speak, "follow the money". If a well-established and privately funded research organisation claimed to be about to dedicate itself entirely to cancer research, it would be very difficult to persuade the government to support the establishment of a new one.

²³² Fischer, A. (1946) "Dansk Kræftforskning" Berlingske Aftensavis København 21.01.1946

The Cancer Centre That Never Was

On a political level, the Carlsberg Biological Institute may thus have posed a threat to innovation within the cancer research community, and this is probably why Engelbreth-Holm completely excluded Fischer and his institute from his plans for the proposed cancer centre. In one of his newspaper letters, the professor addressed Fischer directly on this issue and explained that there was no need to include Fischer's "excellent institute" in a centre which was to be established to allow existing cancer researchers to shed their tiresome duties and dedicate themselves fully to the study of cancer. In contrast to Engelbreth-Holm and his colleagues at the university, Fischer and his Carlsberg Institute "were already privileged to be without such restraints"²³³. Engelbreth-Holm effectively wrong-footed Fischer and his institute – drove him out of the field of cancer research so to speak – and Fischer's institute was not to become part of the future organisation of Danish cancer research in as much as the Danish Cancer Society and later on the Danish government chose to promote Engelbreth-Holm's idea²³⁴.

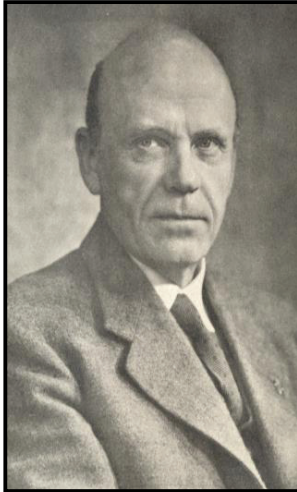
It was thus he who got a chance to draw the scientific and organisational borders for Danish cancer research with his model. He demonstrated that physicians such as himself had a great deal of influence on the Danish Cancer Society (his former employer) inasmuch as the private cancer charity was very susceptible to his idea. And why? Engelbreth-Holm's symbolic capital consisting of his education, work associations, status amongst peers, and networking was a much stronger currency in the cancer community than Fischer's. As mentioned above, the Society was managed in large by physicians, and the private organisation thus functioned as an organisational appendix to this professional group, implementing its definitions of what cancer research was and how it should be organised. Using the North-Bourdieu terminology, the Society was thus guided by the same professional logic and bound to sustain any institutional matrix (formal plus informal constraints) that would increase the symbolic power and wealth of this professional group and carry out its goals. Likewise, in case the institutional matrix worked against the agenda of this group, the Society would try to change it. For this reason, it cannot have been very difficult for Engelbreth-Holm to persuade the Society to back his model rather than Fischer's, which only emphasized the importance of basic biological disciplines in cancer research. As it turned out, the Society and Engelbreth-Holm would succeed in changing the formal institutions determining the potential establishment of a cancer centre, as the government

²³³ Engelbreth-Holm, J. (1946) "Dansk Kræftforskning" *Berlingske Aftenavis* København 21.02.1946

²³⁴ Rud, E. (1953). *Landsforeningen til Kræftens Bekæmpelse 1928-1953*. København, Egmont H. Petersen Kgl. Hof-bogtrykkeri, p. 101. Later on, though, Dr. Zeuthen conducted a series of cell synchronization experiments at the Institute.

The Cancer Centre That Never Was

was persuaded to suddenly lend enthusiastic support for such establishment rather than principally being against state participation in such projects. The following pages will explain this change of heart.



Albert Fisher



Julius Engelbreth-Holm

2.6 Scaling down the vision - The Fibiger Laboratory

Engelbreth-Holm's vision of a large wide-ranging cancer research institute in which the experimental, radio-biological, epidemiological, chemical and patho-anatomical subfields of cancer research could be placed side by side with the cancer clinic, was put into practice in a rather amputated version in 1949²³⁵. As mentioned above, the Danish Cancer Registry had been moved to the new and larger Copenhagen Radium Station, and the costs of building a new research centre in connection with the station remained an insuperable barrier. After extensive negotiation with the University of Copenhagen, it was decided to establish a cancer research laboratory in a wing of Engelbreth-Holm's Department for Pathological Anatomy at the university, and even though this solution did not fully resemble the professor's idea of a wide-ranging cancer research/treatment institute, it was a (modest) starting point²³⁶. However, there is no doubt that the cancer researcher regretted that the laboratory was not built in close connection with the cancer clinic, the Danish Cancer Registry and the radio-biology research at the radium station.

²³⁵ I have found no sources from 1946-1948 on Engelbreth-Holm's model.

²³⁶ Kieler, J. (1989). The Fibiger Institute 1949-1989. Copenhagen, The Danish Cancer Society, p. 5.

The Cancer Centre That Never Was

The lab was assigned a total area of 170 m² which was sufficient for Engelbreth-Holm (the head of the lab) and a staff consisting of a cancer biologist, a chemist and a few technical associates²³⁷. The necessary building alterations were financed by the State while the scientific apparatus was purchased with the help of state-mediated Marshall aid, funds from *Copenhagen University*, *The Danish Cancer Society*, *The Carlsberg Foundation*, *The Academy of Technical Sciences*, the newspaper *Berlingske Tidende*, and several minor private funds²³⁸. Not only was it surprising to see the State give financial aid to the establishment of the centre in times of post-war restrictive financial policy, it was directly unprecedented that the arrangement meant that the Danish Cancer Society and the State agreed to share the operating expenses of the lab between them in equal measure – fifty-fifty! Although the lab eventually needed to seek additional funding from other private funds and international agencies, e.g. the American NCI and Public Health Services, this agreement was unusual at a time when public money was short and seldom invested in research and especially not in medical research not completely within the realms of the publicly operated university.

An important force behind this arrangement was the Danish Minister of Education and professor of philology, Hartvig Frisch, who was cast in the press as a villain impervious to the appeal for more state subsidies for Danish research which a group of Danish researchers set forward in order to avoid Danish research lacking behind other countries, and he was thus portrayed as unpopular with the research community²³⁹. This picture was emphasized as the prominent member of the Labour Party gave a February speech at a scientific prize award ceremony at which he inveighed against the whimpering of the researchers, claiming that scientific genius could not be induced by any grant-awarding authority and that the Danish level of research support was only poor compared with those of larger and wealthier countries like the US²⁴⁰. So what possessed the Minister – apparently an advocate for the historical trend of minimal state financed research support – to make an unprecedented move to support cancer research through a committing, long-term operation of a cancer centre?

The answer is – at least in part – that the Minister was somewhat wrongfully casted as the villain of the Danish research community. Frisch was appointed minister in 1947 when he took over

²³⁷ Rud, E. (1953). *Landsforeningen til Kræftens Bekæmpelse 1928-1953*. København, Egmont H. Petersen Kgl. Hof-bogtrykkeri, p. 101.

²³⁸ Ibid.

²³⁹ Bladel, N. (1949) "Videnskaben er skuffet over Hartvig Frisch" *Berlingske Tidende* 27.01.1949.

²⁴⁰ Frisch, H. (1949). "Forskeren og Samfundet (tale d. 12. februar 1949 ved uddelingen af Ekstrablade videnskabspris)". *Store og små kulturproblemer*. H. Frisch. København, Forlaget Fremad: 105-115, p. 109.

The Cancer Centre That Never Was

office from his predecessor M. R. Hartling, who had taken the post-war concern for Danish research seriously in the face of the depletion or re-prioritising of the private foundations (the Carlsberg Foundation and the Rockefeller Foundation) the field had come to depend on²⁴¹. In 1946 Hartling managed to establish a scientific committee – a forerunner of the later scientific councils – to support basic research. From the start, the researcher and politician Hartvig Frisch had supported this work to improve the conditions for Danish research/science, and as minister a year later he continued this work although on quite different terms. The likewise newly appointed Minister of Finance, H.C. Hansen, exercised a very restrictive financial policy and considered financial support for cultural or research activities an abomination²⁴². In this light, negotiating state subsidies for research was a difficult task for Frisch, and according to his later biographer Frisch did what he could for Danish research²⁴³. So when the minister publicly thundered against the whimpering of the scientific community and said they should instead treasure the existence of the private foundations, this could be evidence that he had to choose his battles carefully if he was to get anything through the financial restrictions of his colleague. And perhaps basic research and serendipity results were a harder “sell” than applied, problem-solving research-treatment interplay.

For example, Frisch stayed completely out of an otherwise dramatic demonstration in the scientific community to turn the newly established scientific commission into actual grant-awarding research councils²⁴⁴, while he did choose to go into the matter of the cancer centre that would require substantial subsidies. Then again, the problem-solving research policy behind Engelbreth-Holm’s cancer centre vision, and the political attention to the latest publications of the cost-effectiveness of research based treatment modalities and progresses from the last decade²⁴⁵, may altogether have served as an opportunity and an example for Frisch to show his colleague that it pays to invest in research to bring down the public expenditures for cancer treatment at the county and municipal hospitals.

²⁴¹ Christiansen, N. F. (1993). Hartvig Frisch - Mennesket og Politikeren. København, Christian Ejlers' Forlag, p. 311.

²⁴² Ibid., p. 312.

²⁴³ Ibid.

²⁴⁴ Knudsen, H. (2006). "Politik, Penge og Forskningsvilkår". Viden uden grænser 1920-1970. H. Nielsen and K. H. Nielsen. Aarhus, Aarhus Universitetsforlag: 323-346, pp. 336-7.

²⁴⁵ Jacobsen, K. and K. Larsen (2007). Ve og Velfærd - Læger, sundhed og samfund gennem 200 år. København, Lindhardt og Ringhof, pp. 402-3.

The Cancer Centre That Never Was

During the 1930s, the hospital sector had experienced a massive expansion in order to accommodate the growing number of patients (now with mandatory health insurances)²⁴⁶ and in 1946, a new hospital act was carried through to increase the level of state subsidies to these hospitals which in the 1940s left little room for investment in hospital/institute construction²⁴⁷. However, the focus of this act and the hospitals was treatment, not research, as the subsidies depended on the hospitals' increased number of treatments. In this perspective, a joint agreement to establish and run the new cancer centre must have made sense to Frisch and his government colleagues as he managed to push through the unprecedented arrangement of private-public financing of the problem-solving initiative.

So in 1949, Frisch made the unprecedented move that changed the formal institutions for the cancer field. He supported the establishment of the new public-private cancer research laboratory which was given the catchy name: *The State's and The Danish Cancer Committee's Laboratory for Experimental Cancer Research at the University's Department for Pathological-Anatomy*. It was very important for all involved parties to have their name attached to the new laboratory which represented an important people's cause; the fight against cancer. However, the chairman of the Danish Cancer Society suggested that for convenience the lab should be referred to as *The Fibiger Laboratory*, in memory of the great Danish cancer researcher Johannes Fibiger²⁴⁸. According to the ceremony participant Einar Rud, it was a special day:

(...)because this was the first durable collaboration between the university (i.e. the State) and a private institute on a scientific task, so that the State provided the outer frameworks, the building, and side by side with the Danish Cancer Society took care of the operating expenses. The Minister of Education, Hartvig Frisch, thanked the society for its initiative and spirit of self-sacrifice, and was confident that similar sacrifices from private organisations would always be a good way to get the State to contribute to the advancement of science.²⁴⁹

Frisch and the rest of the Danish government thus made organisational expansion in the cancer field possible and opened up new vistas for a joint public-private fight against cancer. The

²⁴⁶ Ibid., p. 330-333.

²⁴⁷ Haave, P. (2006). "The Hospital Sector - a four county comparison of organisational and political development". *The Nordic Model of Welfare*. N. F. Christiansen, K. Petersen, N. Edling and P. Haave. Copenhagen, Museum Tusculanum Press: 215-242, p. 221.

Vallgård, S. (1992). *Sygehuse og sygehuspolitik i Danmark*. Denmark, Jurist- og Økonomiforbundets Forlag, p. 327 (table 8.10.1). The collective (state, municipal, county) investment in new hospitals etc. Was increased from 5, 677 million DKK in 1930/31 to 21,500 million DKK in 1939/40. From 1942-48, the investments were considerably lower (from 4,8 million DKK to 9 million DKK).

²⁴⁸ Rud, E. (1953). *Landsforeningen til Kræftens Bekæmpelse 1928-1953*. København, Egmont H. Petersen Kgl. Hof-bogtrykkeri, p. 102.

²⁴⁹ Ibid.

The Cancer Centre That Never Was

formal institutions were changed, and the government invited the cancer field organisations to utilize the new possibilities for wealth maximization and pursuit of goals that the new matrix offered.

The agreement between the State and the private cancer charity was not to be observed, though. Perhaps because Frisch fell ill and died the year after the inauguration²⁵⁰. The misunderstood advocate of science in the government was no more. Throughout the next decades, the State's contribution to the operation of the Fibiger Laboratory was gradually being reduced, leaving the Danish Cancer Society with the lion's share of the expenses. Even though Frisch's death may have left the government lacking a research advocate opposite the Minister of Finance, the gradual downsizing was still surprising as the next decades brought about massive investments in research facilities and hospitals due to an improving economy, the effects of the post-war Marshall aid given to mobilise European science, and the election of a new socialist government in 1953 who favoured the construction of scientific institutes/faculties and hospitals with generous financial allocations in sharp contrast to the former government²⁵¹. During the same period, however, the State increased its funding for the radium stations, and in this way the private Danish Cancer Society was forced to assume close to full responsibility for the funding of Danish cancer *research* while the *treatment* of cancer was gradually managed completely by the State²⁵².

The transition reflected what the future held in store for the young Fibiger Laboratory. The lack of continual governmental funding meant that the Society only managed to create an amputated version of the cancer centre envisioned by Engelbreth-Holm. Nevertheless, the inauguration of the Fibiger Laboratory had marked an unusual state-initiated creation of formal institutions that supported the establishment of new organisations in the cancer field. The initial political backing of the cancer centre – although no cancer policy was actually formulated – thus set the scene for the pursuit of a larger and comprehensive version of the centre for many years to

²⁵⁰ Christiansen, N. F. (1993). Hartvig Frisch - Mennesket og Politikeren. København, Christian Ejlers' Forlag, p. 312-315.

²⁵¹ Knudsen, H. (2006). "Politik, Penge og Forskningsvilkår". Viden uden grænser 1920-1970. H. Nielsen and K. H. Nielsen. Aarhus, Aarhus Universitetsforlag: 323-346, p. 340.

Vallgård, S. (1992). Sygehuse og sygehuspolitik i Danmark. Denmark, Jurist- og Økonomiforbundets Forlag. P. 327-328 (table 8.10.1). The level of state expenses for investment in new construction of hospitals increased from 2,4 million DKK to 169 million DKK in the period from 1953-1971.

²⁵² Kieler, J. (1989). The Fibiger Institute 1949-1989. Copenhagen, The Danish Cancer Society, p. 8. In 1962, the operation of the radium stations became a responsibility of the State, and the Finsen Institute was later engulfed by Rigshospitalet, as its founder had foreseen.

The Cancer Centre That Never Was

come. A “path” was created that could be followed or abandoned for another depending on the dynamics of the institutional matrix to come.

In the first years of its existence, the laboratory established a research program for chemical carcinogenesis which was the favourite field of the cancer researcher who lent the laboratory its name. In 1956, the laboratory was fused with the University's Institute of Cell Physiology and this expanded the research program with studies of DNA metabolism and cell growth. The lab was divided into a biology department headed by Dr. Jørgen Kieler (a former employee at the Aarhus Radium Station) and a biochemistry department led by Dr. Hans Klenow²⁵³. The university departmental structures and research programs thus shaped the work done at the private Fibiger Laboratory. The small laboratory was soon pressed for space, but the Department for Pathological Anatomy was not inclined to give away more of its own space. Engelbreth-Holm was thus torn between his status as director for the university department and his dream of a wide-ranging cancer research centre, and he started to wonder whether or not the Danish Cancer Society would now be able to fund his old plan of placing the cancer centre at the Finsen site. In this way, the experimental cancer research of the Fibiger Laboratory would finally be united with the epidemiological and clinical cancer research at the Finsen Institute.

However, it would be a bold move for Engelbreth-Holm to promote such an idea, for it would almost certainly get him into trouble with the university management and his own department who would suffer serious financial problems if the privately financed Fibiger Laboratory was to move to extramural premises²⁵⁴. Also the proposed scientific combination would challenge the domains of the traditional medical specialities by which the medical community shaped their fields, structured their hospitals and education system. The lab, on the other hand would lose one of its sponsors, but it would be given physical and strategic room to expand its activities and pursue the direction originally set by Engelbreth-Holm.

But Engelbreth-Holm never did make any final decision on the matter as he died suddenly during a trip to London in 1961²⁵⁵. Without him, the prospects for putting his dream of a wide-ranging cancer research institute into practice did not seem good, as the centre's move and activities demanded much lobbyism from a visionary and well-respected representative from the

²⁵³ Ibid. p. 6.

²⁵⁴ Ibid. p. 7.

²⁵⁵ Es. (1961) "Dansk kræftforsker død paa vej til London" Berlingske Tidende 18.01.1961, p. 4.

The Cancer Centre That Never Was

medical community. A community, which would most likely consider the Fibiger Laboratory an unwelcome disturbance of the traditional medical specialities.

However, Engelbreth-Holm died at a time with formal institutions in favour of scientific expansion in Denmark. From the mid-1950s to 1970, the government had started to invest more money in the establishment of new scientific institutes and hospitals. This was an unprecedented scientific offensive with the purpose of making Danish research internationally competitive²⁵⁶. Despite the lack of state support for the Fibiger arrangement, all hope was not gone for an expansion and realisation of Engelbreth-Holm's cancer centre dream. At least on paper, the time seemed ripe for organisational growth in the cancer field as well as the many traditional and new scientific disciplines²⁵⁷ and medical specialities at the universities and hospitals, and Engelbreth-Holm's dream of a wide-ranging cancer research institute thrived in spite of the death of its creator/originator.

The potential new location of the Fibiger Laboratory – the Finsen Hospital – had clear financial interests in having the Danish Cancer Society move the lab into new buildings at the Finsen campus, because these buildings would also house their own *Finsen Laboratory*. Meanwhile, the arrangement would allow the Cancer Society to regain some of the influence – or more accurately the *public visibility* – it had lost when the State took over the responsibility of cancer treatment at the radium stations. A sound transaction for both parties. It allowed them to maximize their respective organisational wealth, symbolic capital and position in the cancer field. But the move was never realised because the Finsen building was encumbered with rigid restrictions that did not allow for new constructions to be made²⁵⁸. In May 1965, the Fibiger Laboratory was moved to the Copenhagen suburb of Lyngby instead. Here, 1,400m² of office space had been modified to fit the needs of a modern laboratory. The Fibiger laboratory was now dubbed an independent *institute*, and according to Dr. Jørgen Kieler, who was appointed

²⁵⁶ Later on, the government established six advisory research councils consisting of experts from the scientific community with the purpose of supporting Danish research and advising the Danish government on the organisation of public research activities. Danish researchers would apply for state support for their research through these councils. The proposed research projects would be subject to peer review. The research councils had the mandate to initiate and support new lines of research if needed. The six research councils were: The Danish Technical Research Council (1946), The Danish Natural Science Research Council (1968), The Danish Medical Research Council (1968), The Danish Agricultural and Veterinary Research Council (1968), The Danish Social Science Research Council (1968), The Danish Research Council for the Humanities (1968).

²⁵⁷ E.g. the establishment of new disciplines such as molecular biology at the new science faculty at Aarhus University. See. Nielsen, A. K. and M. L. Thomsen (2006a). "I det biokemiske og molekylærbiologiske spændingsfelt". *Viden uden grænser 1920-1970*. H. Nielsen and K. H. Nielsen. Aarhus, Aarhus Universitetsforlag: 183-200

²⁵⁸ Kieler, J. (1989). *The Fibiger Institute 1949-1989*. Copenhagen, The Danish Cancer Society, p. 7.

director, the settings and facilities were excellent to the extent that the staff was reluctant to move back to Copenhagen in 1973, when the Danish Cancer Society had found a way around the legislative obstacles and constructed new laboratory-buildings at the Finsen campus²⁵⁹.

2.7 The molecular bandwagon of cancer research

The scientific progress and institutionalisation of molecular biology throughout the 1950s and 1960s influenced centre plans as well. The discipline was popular, and the use of the word “molecular” in the titles of laboratories, disciplines and academic courses spread like wildfire. The “molecularisation” affected areas such as pharmacology, medicine and cancer research²⁶⁰. The popularity now resonated in the Danish Cancer Society, though both the organisation and the research area it supported had traditionally – and with few exceptions – been the domain of physicians, and not basic scientists. The introduction of chemotherapy in the 1960s made more medical doctors interested in the area. Even though the Fibiger Institute was not yet fused with a clinical department with access to patients, the molecular biology approach helped bridge the gap between the research programs of basic and clinical cancer work. Despite this influx of basic researchers into cancer research and its following isolation from the bedside, the molecular approach never grew incompatible with Engelbreth-Holm’s cancer centre dream of the 1940s.

In 1967, the Head Board had decided to lease the Finsen campus for 50 years from the State, with the option of extending the lease or eventually buying the site, as a way to build new and more suitable housing for the Fibiger lab that was only temporarily stationed in Lyngby until the building restrictions were removed²⁶¹. The construction of new research buildings was delayed several times as a result of the death of the project architect W. Groth-Hansen, public fiscal restrictions, and the very cold winter of 1969²⁶². But Jørgen Kieler argues in his jubilee publication for the Fibiger Institute that Engelbreth-Holm’s dream of a wide-ranging cancer research centre still seemed to be a strong guideline for the Society in spite of these difficulties, as the cancer organisation was striving to place its research units at or near hospitals in order to strengthen the relation between experimental, epidemiological and clinical cancer research²⁶³.

²⁵⁹ Ibid. p. 14.

²⁶⁰ Morange, M. (2000). *A History of Molecular Biology*. Harvard, Harvard University Press, p. 179.

²⁶¹ KB (1967). Byggesagen. *Fælles Sag*: 3., p. 3.

²⁶² KB (1970). Beretning om Landsforeningens virksomhed. *Fælles Sag*: 2., p. 2.

²⁶³ DVU (1969). *Kræftforskningens vilkår i Danmark*. København, Landsforeningen til Kræftens Bekæmpelse; Kieler, J. (1989). *The Fibiger Institute 1949-1989*. Copenhagen, The Danish Cancer Society, pp. 3-8, 10, 15. On the organisation’s plans to place its units near hospitals, see: DVU (1969), p. 7.

The Cancer Centre That Never Was

If this was correct, it essentially meant that Engelbreth-Holm's broad definition of cancer research affected the organisational structures²⁶⁴. If the Fibiger Institute was moved to the Finsen campus, Engelbreth-Holm's dream was about to come true. But although the Fibiger-staff was all for the idea, it was not happy with the move. The institute's scientific work suffered from the constant changes of address, and the construction of the new premises was not satisfactory. In the words of Kieler:

Our objection to the building which was to be constructed at the campus of the Finsen Institute was mainly directed towards the small diameter of not more than 13 m. This would deprive us of the advantages of being on one floor. When we finally had to move to this new building, The Fibiger Institute was dispersed over five floors, and the few elevators became a bottle neck. However, our most serious criticism was based on an ever growing suspicion that the Finsen Institute was not going to survive. At that time the hospital situation in the Copenhagen area became more and more chaotic because of bad planning and incompetent authorities. Huge new hospitals were being constructed in the suburbs of Glostrup, Hvidovre and Herlev, and at the campus of Rigshospitalet in Copenhagen. (...) Would there be patients enough? If not, the smaller hospitals like the Finsen Institute would soon be doomed. – Our suspicions eventually proved to be absolutely correct.²⁶⁵

Even though plans were eventually made to move the hospital unit into the new and bigger Rigshospital, it had not yet been transferred when the Fibiger Institute moved to the Finsen Campus in June 1973. However, even with the geographical proximity to the clinical units of the Finsen Hospital, the Fibiger Institute was not to become the permanent *wide-ranging* cancer research institute envisioned by Engelbreth-Holm, although the Chairman of the Danish Cancer Society, Dr Charles Jacobsen, claimed that it was exactly that in his opening speech at the inauguration of the new research building²⁶⁶.

The research building accommodated the Fibiger Institute of the Danish Cancer Society as well as the Finsen Laboratory and the pathology department and the pharmacy of the Finsen Institute. But the two institutes did not have a common research management or organisational interest, and time would tell that geographical proximity alone was no guarantee for scientific

²⁶⁴ In 1962, when the State took over the operation of the radium stations, the research units at the Aarhus Radium Station had been moved to the city's Municipal Hospital to form the Cancer Research Institute, but although this move facilitated the organisational settings for both clinical and experimental cancer research, the new institute was not identical to Engelbreth-Holm's dream of a wide-ranging cancer research institute because of its small size. See, Kjeldgaard, N. O. (1982) "Hvad skal der ske med kræftforskningen i Danmark?" *Jyllands-Posten* 02.03.1982, p. 9.

²⁶⁵ Kieler, J. (1989). *The Fibiger Institute 1949-1989*. Copenhagen, The Danish Cancer Society, p. 15.

²⁶⁶ KB (1973). *Indvielsen af Landsforeningens nye forskningsbygning på Finseninstituttet*. *Fælles Sag*: 1-3., p. 1.

The Cancer Centre That Never Was

coordination and collaboration between the two institutes. Engelbreth-Holm's idea was thus not realised in the manner he would have hoped.

On top of this, the outlook for greater State investments looked bleak as the oil crisis of 1973 had put an end to the era of financial growth and scientific expansion²⁶⁷. The oil crisis marked the beginning of an era of financially restrictive state policy in the fields of science and the hospital sector. However, the idea of the cancer centre did seem to have found footing in the cancer community, and in 1981 it would once again resurface and be subject to much controversy as a subcommittee of the *Danish Natural Science Research Council (NSRC)* presented its recommendations for the future organisation of Danish cancer research in what was to become known simply as *the Kjeldgaard Report*.

2.8 Perspectivating summary

In 1945-1946, Dr. Albert Fischer and Dr. Julius Engelbreth-Holm presented their visions for the future of the cancer war in the daily press. They were both inspired by the organisational possibilities that cancer research and treatment were given in other countries, where the respective governments formulated cancer policies and created the formal institutions to support the war on cancer through new ways of organising and coordinating cancer research and treatment. However, no such formal institutions were created in Denmark. According to Douglass C. North, only the strongest entrepreneurs/organisations could make even incremental institutional change for new organisational possibilities. No one in the Danish cancer community was as of yet sufficiently strong to push for such change, and the two cancer researchers therefore pleaded their case to the broader public – through the media of newspaper – probably hoping that the power of public opinion could bring about state funding or other types of political engagement in the anti-cancer cause.

The two researchers had very different disciplinary and organisational affiliations, though, and they did not at all see eye to eye on the nature of the proposed organisational change that, aside from strengthening the fight against cancer, would also improve their personal position in the cancer field. The newspaper debate became a battlefield between two entrepreneurs striving to change the institutional matrix and to position themselves as dominant and powerful characters

²⁶⁷ Nielsen, H. (2004). *Disse fag må lempes til verden... - Oprettelsen og udbygningen af Det Naturvidenskabelige Fakultet ved Aarhus Universitet*. Gylling, Aarhus Universitetsforlag, p. 45.

State investments in the construction and operation of hospitals remained relatively high in the 1970s, but mainly as the result of decisions made in the 1960s where investment costs peaked. See, Vallgård, S. (1992). *Sygehuse og sygehuspolitik i Danmark*. Denmark, Jurist- og Økonomiforbundets Forlag. P. 393-394.

The Cancer Centre That Never Was

in the cancer field. It was Engelbreth-Holm's model that eventually won the support of the Danish Cancer Society and the cancer community, and he even managed to create a necessary and powerful alliance between the Danish Cancer Society and the Danish Minister of Education, Hartvig Frisch, which resulted in new formal institutions favouring the establishment of his proposed cancer centre.

In a theoretical perspective, the reason for this line of events can be divided in two:

1. Engelbreth-Holm's model was favoured because of his superior symbolic capital and because the content of his idea played into a political agenda.
2. The formal institutions favouring the cancer centre was the compromise of internal governmental disagreement on science policy in restrictive financial times.

The two contenders in the cancer field reflected different professional logics and strength of symbolic capital. Sociologist Pierre Bourdieu argues that different professional groups are guided by different logics and that it is the overall norms and goals that unify and identify the group from others. The physician and cancer researcher Engelbreth-Holm belonged to the medical community and held the same professional logic that the management of the Danish Cancer Society belonged and subscribed to. In other words, the Cancer Society was an organisational appendix to the cancer physicians and not Fischer's basic biological research community. The Society was therefore prone to understand and favour "one of their own" – a former employee at the Copenhagen Radium Station. Engelbreth-Holm's symbolic capital was a much stronger currency than Fischer's in the cancer field, and this is why the Cancer Society chose to promote his model rather than the one proposed by a cell biologist acting according to different professional logic than the Society's own.

Bourdieu often compares the rules and power struggles of a social field with the rules of different types of sports or war in which tactics and exit strategies are of the essence. This comparison seems to fit the case of Fischer's and Engelbreth-Holm's newspaper debate very well. The public was their arena, they battled with symbolic capital (scientific reputation, professional status, network etc.) as their weapons in order to gain the most prominent position in the (future) cancer field and in order to secure funding for their future work. At some point Fischer must have realised that he was losing the fight, and he thus employed an exit strategy to avoid complete annihilation. He changed his model from an international centre to a network of national cancer laboratories which he argued was more suitable for a country like Denmark than

The Cancer Centre That Never Was

a large wide-ranging cancer institute (like Engelbreth-Holm's model) that was in danger of monopolising the funds for Danish cancer research.

In the Bourdieuan universe of fields, positioning and power struggles, this should be seen as Fischer's sudden accept of his model's defeat in the cancer community (the Cancer Society) that favoured Engelbreth-Holm's model due to his symbolic capital. Fischer changed his model in order to assign himself a lower ranging position in the periphery of the field (but not completely out of the loom of influence and funding) at the mercy of Engelbreth-Holm, instead of sticking to his original model that was completely incompatible with Engelbreth-Holm's and which would surely exclude him from the field altogether. Nevertheless, Engelbreth-Holm showed no mercy, and Fischer and his institute was never made part of the plans for a Danish cancer centre.

Nevertheless, the Cancer Society was neither wealthy nor powerful enough to turn Engelbreth-Holm's vision into practice by itself. Especially not with the institutional matrix acting against state support for building hospitals or scientific institutes. And seeing that the cancer centre was to include university and privately financed research groups as well as public clinical departments (hospitals), it would be necessary to convince a public authority, and preferably the government, to back and help finance the establishment and operation of the cancer centre. In 1949, such a powerful alliance was created in order to change the institutional matrix. The Minister of Education, Hartvig Frisch, created new formal institutions for the organisation of the anti-cancer cause as he promoted the establishment of an amputated version of Engelbreth-Holm's dream of a comprehensive cancer centre: the Fibiger Laboratory.

Frisch had been casted by the scientific community in the role of the villain as he was not susceptible to their pleas for greater state-funding of Danish science. Although personally inclined to support science and culture, Frisch's colleagues did not share this view in harsh financial post-war times. In particular the Minister of Finance argued that allocations for science and culture were abominations, and Frisch would have a hard time getting any such initiatives through and remained loyal to the government's policy on the matter. Being unpopular within academia, the minister Frisch must have needed to present some success story, and the Cancer Society's plans of a cancer centre (starting modestly with a lab) focusing on actively battling the costly cancer scourge must have presented itself at the right time, and Engelbreth-Holm's idea thus played into a political agenda.

The Cancer Centre That Never Was

The lab was to be financed and operated as a joint public-private venture – the first of its kind in Denmark which must have made it an easier “sale” to the rest of the government. The collaboration between the private Cancer Society, the state-financed Copenhagen University and the government was an opportunity for all partners to establish a cancer centre at the lowest possible costs. And although the State would not uphold its part of the deal for long, the establishment marked a new institutional matrix with new organisational possibilities, and the pursuit of Engelbreth-Holm’s dream of the comprehensive cancer centre continued for decades to come.

The State eventually took over all responsibility for cancer *treatment* in the country from the private radium stations, and the Danish Cancer Society therefore needed to be visible in other areas of the fight against cancer in order to secure the charity’s future existence. The Society pursued the idea of the cancer centre throughout the 1960s and 1970s for this purpose, although the establishment of such a unit with both research and treatment activities was both costly and difficult to put into practice due to a variety of reasons: building restrictions at the Finsen campus, the Fibiger staff’s opposition towards a move, and delays due to construction problems. For of course, one could argue that in times of favourable formal institutions, the state-supported scientific expansion in 1950-1970, it would have been the best possible time to gain state-support for the establishment of a cancer centre. New scientific disciplines, medical specialities and public labs were popping up everywhere, yet the cancer centre was put on hold due to building restrictions? It seems unlikely if both formal and informal institutions (eg. the taste and preferences of the researchers) were all for the establishment, but perhaps the informal institutions were not that favourable anyway.

In contrast to the 1940s, public cancer researchers at the universities and hospitals were now given good lab facilities and working conditions in their “home” disciplines and departments. They no longer had a need for a specialised cancer centre to plea for additional funding using problem-serving, applicable research rhetorics and arguments about bridging bench and bedside. No need for rhetorics stressing the apparent unity of the heterogenous cancer field. The money was already there for their respective disciplines. There was no need to promote a new one. The private Society’s researchers apparently felt the same as they initially opposed a move of the Fibiger Institute from Lyngby to the Finsen grounds, where the charity had plans to establish the comprehensive cancer centre on its own. It seems that only the Society as a cancer fighting organisation – a charity – would benefit from continuing the pursuit of the centre dream and the

The Cancer Centre That Never Was

lost formal institutions that hatched it, in order to remain visible and attract donations for its cause and strategic research aim in the era of a State “science push” research policy. The Society therefore continued down the path of a cancer centre that did not pay off. It got it wrong, so to speak, but it did not correct its actions even though the strategy to keep on planning for a cancer centre may have given it some means of PR, the operation of research units of bricks and mortar was not in accordance with the organisation’s strategy to push for a state takeover of as many cancer related services as possible.

By operating its own research units and not succeeding in handing them over to the State – either through a shared comprehensive centre as was the original plan or simply through ownership transactions as with the radium stations – the Society was not free to support research projects only. After all, it did not have unlimited funds. The internal conflict of the small charity’s strategy to pursue PR and a state-takeover whilst functioning as a cancer foundation also marked the beginning of a transition for the charity. A transition during which the organisation seemed to get it wrong for a very long time by staying on the path of past institutions. But it was not corrected in the same way that classical economical theory claims the market will always correct a company making bad choices. At this point, the charity sought to gain publicity and visibility by pursuing the costly centre dream. Visibility that could be transformed into donations for the worthy anti-cancer cause and at this point, the cancer charity was not yet subject to market rules and strategy in Denmark, as will be discussed in the following chapter. Perhaps this explains the longevity of the charity and its support for the centre idea and the centre path in the face of other, more institutionally compliant alternatives. It was not punished by a stop of donations. At any point in this lengthy process, the idea of the cancer centre could have been dropped for other more feasible alternatives, but it was not. It seems that Hartvig Frisch created a path in 1949 that was not easily abandoned in spite of potholes and a lack of overwhelming positive feedback and increasing returns along the way. At least not in the form of an established centre and state commitment.

And there were alternative paths to be followed. Due to the difficulties of finding a suitable location for the proposed centre, the small Fibiger Laboratory was moved to temporary facilities in Lyngby where the staff thrived. The staff even feared that their work would be impaired by a planned move to the Finsen ground to be part of the new all-encompassing centre, as the fate of the Finsen Hospital was unclear and the move itself would take its toll on the Fibiger Laboratory’s activities. Yet, the Society continued to pursue the idea of an all-encompassing

The Cancer Centre That Never Was

cancer centre in connection with the Finsen Hospital, anyway. A path was created and followed even in the face of alternatives enjoying more positive feedback.

In 1981, the Danish cancer community would lock onto this path with the publication of the Kjeldgaard Report in which the State's research council made unprecedented recommendations to finally establish a comprehensive cancer centre. But were the recommendations built on sound statistical and scientific data?

The Cancer Centre That Never Was

Name:	Institutional affiliation:	Summarised actions in this chapter (key persons only):
Dr. Niels Peter Ernst	Danish MD (gynaecologist) and member of the Danish Society for Gynaecology and Obstetrics	Wanted to organise the Danish “fight against cancer” by establishing an anti-cancer committee (1904).
C.O. Jensen	-Danish veterinarian and cancer researcher - chairman of the Danish Cancer Committee 1907	-
Jacob Appel (1866-1931)	-Minister of Church and Education (1910-13) - Member of the Radium Fund Management in 1912	-
Johannes Fibiger	-Danish Cancer research and Nobel Laureate (1926) - Professor and Director of the Dep. For Pathological Anatomy at Copenhagen University. - Member of the Radium Fund Management in 1912	-
Niels Finsen (1860-1904)	Danish Nobel Laureate (1903) and founder of a Light Therapy Institute (known simply as the Finsen Institute from 1930)	-
Dr. Johannes Clemmesen	Danish Cancer epidemiologist and pathologist from the Finsen Institute. Became chief of the Danish Cancer Registry in 1942.	-
Dr. Julius Engelbreth-Holm (1904-1961)	- Danish cancer researcher at the Laboratory for Pathology (Copenhagen University) - Research head of the Danish Cancer Society’s laboratory for experimental cancer research in 1938-1941. - Professor at the Dep. For Pathological Anatomy in 1941.	1945-46: Called for better institutional settings for the anti-cancer cause in Denmark. He wrote newspaper articles to suggest the establishment of a national wide-ranging cancer institute with both experimental, clinical and epidemiological cancer research and treatment under the same roof. He was inspired by the Memorial Hospital in New York. He wanted the new institute to be placed at the Finsen Institute, and hoped to be head of the institution, and got the Cancer Society to support his institution-proposal rather than the rivalling institution proposed by Albert Fischer.
Dr. Albert Fischer	Cell biologist. Director of the Carlsberg Biological Institute	1945-46: He first proposed an international, mission-oriented research centre shaped by the organisational principles behind the Manhattan Project in order to fight cancer. However, when Engelbreth-Holm proposed a national cancer centre, Fischer proposed another model: a series of publicly funded cancer labs. He believed a cure against cancer would be obtained through the

The Cancer Centre That Never Was

		findings of basic biological sciences such as cell biology. Wrote newspaper articles to undermine the rivalling centre-proposal made by Engelbreth-Holm.
Kaj Linderstrøm-Lang (1896-1959)	-Danish Biochemist of the privately owned Carlsberg Laboratory, Copenhagen. - Wrote Albert Fischer's obituary.	-
Hartvig Frisch (1893-1950)	Danish Minister of Education, Labour Party, (1947-49)	Participated in the establishment and inauguration of the Fibiger Laboratory. Created the first formal institutions that supported the establishment of a public-private cancer centre.
Dr. Einar Rud	-The Danish Cancer Society - Was present at the inauguration of the Fibiger Laboratory, and author of a history of the Danish Cancer Society.	-
Dr. Jørgen Kieler (1919)	Head of the biological department at the Fibiger Laboratory Later Director of the Fibiger Institute.	-
Dr. Hans Klenow (1923)	Head of the Biochemistry department of the Fibiger Laboratory. In 1958, Professor of Biochemistry at Copenhagen University	-
W. Groth-Hansen	Architect on the plans to place the Society's research units at the Finsen grounds in the 1960's.	-
Dr. Charles Jacobsen	Rigshospitalet and chairman of the Danish Cancer Society 1973.	-

Chapter 3 The Kjeldgaard Report

Path re-actualisation and lock-in

The idea of an all-inclusive public-private cancer centre resurfaced in 1981 when a subcommittee of the Danish Natural Science Research Council (NSRC)²⁶⁸ presented a report with its recommendations for a more efficient organisation of Danish cancer research. As advisors to the government, the NSRC and its subcommittee was positioned to affect formal institutions. The report suggested that cancer research should be made a priority as this important research area was in need of coordination and state funding. The report argued that the establishment of a series of US-inspired comprehensive cancer centres, much like the one proposed by Engelbreth-Holm 40 years earlier, would help achieve coordination and yield better research results although the report's own statistical data did not support such a claim. Most of the report's recommendations were not put into practice because the report turned out not to have weighty leverage to challenge the existing institutional matrix and change the government's manner of conducting research policy and national research programs. But its findings resulted in changes within the private Cancer Society which used the report to implement budget reforms and international evaluations of its research units. Changes that heralded a new era of business inspired managerial style in the private cancer charity.

As mentioned in the previous chapter, the formal institutions set by Hartvig Frisch in 1949 at the inauguration of the Fibiger Lab did not result in a realisation of Engelbreth-Holm's idea of a cancer centre. The idea stagnated from 1949-1979. The stagnation happened in spite of the massive state investments in universities and hospitals from the mid 1950s to the early 1970s. In other words, the stagnation occurred in times when the State was more than willing to invest in new constructions as part of the strategy that an expansion of the public sector would bring about increased public demand for of private services in the construction business, create more private and public jobs (employment rate) and generally improve the economy of the country²⁶⁹.

²⁶⁸ The NSRC was one of six research councils set up by the government in the late 1960s, and its members were all scientists from a wide range of research institutes. The purpose of the councils was to review project applications for state funding and to advise the government on the organisation of public research activities. Also, the NSRC and other research councils had the mandate to identify new and interesting research areas in need of cultivation and suggest that they be made a special priority of the State.

²⁶⁹ Jacobsen, K. and K. Larsen (2007). Ve og Velfærd - Læger, sundhed og samfund gennem 200 år. København, Lindhardt og Ringhof, p. 416.

The Cancer Centre That Never Was

During the 1960s this financial boom gave rise to an average of 5% economic growth pr year, as unemployment was at an all time low, women entered the work force, the country changed from an agricultural to an industrial nation, the educational level was raised in general and the expenditures for the public sector accounted for more and more of the gross domestic product increased from 28 to 42 % in the years 1960-71²⁷⁰.

The public (state/county/municipal) investments in building new somatic and psychiatric hospitals alone increased from 12.5 million DKK in the fiscal year 1954/55 to 917 million DKK in the fiscal year 1970/71²⁷¹. Of this the State alone contributed from 6.6 – 169 million DKK in the respective period of time. Considering the then current inflation, this was a substantial increase of investments, and the hospitals experienced a parallel increase in operating costs as well. Apart from investment in new equipment and apparatus, these costs mostly covered salaries for the many new employees at the hospitals which took on the vast majority of the country's medically educated personnel in new centralised and highly specialised treatment and research facilities²⁷². In the light of such expansion – which was considered a completely natural development by both politicians and their electorates – the formal institutions for a new *cancer* centre were apparently there, yet there is no evidence that anyone in the cancer community pushed for the idea of the centre to be put into practice with the help of these institutions and the state support they would result in.

On the contrary, researchers working on cancer problems at both public hospitals and the university and the private Fibiger Institute did not push at all (some even opposed) the establishment of it if it impaired or did not markedly improve the working conditions they had at their respective research institutes. Only for the private cancer charity was there a need to promote a centre, at the organisations existence depended on its visibility in the public eye but which could not at this point financially support an entire centre alone and needed to reinstate the formal institutions for state support of 1949. So the predominant silence surrounding the centre idea might on a first take seem strange, but in an institutional perspective there seemed to be an explanation as will be evident in this chapter. In times of favourable formal institutions and financial high conjunctures, the taste and preferences of the researchers acted against the

²⁷⁰ Ibid.

²⁷¹ Vallgård, S. (1992). *Sygehuse og sygehuspolitik i Danmark*. Denmark, Jurist- og Økonomiforbundets Forlag. P. 327-328. The total public (state/municipal/county) investments in the same period increased from 12.5 million DKK to 917 million DKK.

²⁷² Jacobsen, K. and K. Larsen (2007). *Ve og Velfærd - Læger, sundhed og samfund gennem 200 år*. København, Lindhardt og Ringhof, p. 416-17. Operating costs went up from 715 million DKK to 3.9 billion DKK in 1960-1971.

The Cancer Centre That Never Was

establishment of a centre as informal constraints. In part, the idea of the centre may have stagnated due to the deaths of its stoutest defenders Engelbreth-Holm and Hartvig Frisch.

In part, the Danish Cancer Society succeeded in making the State take over the operation of and cancer treatment at the radium stations in 1962, and this achievement may have been prioritised over the idea of the cancer centre. One could speculate that the Society did not want to push the envelope by demanding a centre in the wake of the state takeover, but it seems unlikely that the cancer charity would deliberately refrain from seeking additional state support for the plans it tried to carry out in spite of building restrictions at the Finsen grounds and internal protests of the staff at the Fibiger laboratory. Even if it believed it could manage on its own.

In essence, the idea of the cancer centre was neither promoted nor entirely abandoned – even though considered unattractive by the staff at Fibiger – in times of favourable formal institutions in the form of massive state investments. It is peculiar that the private charity could stand the pressure of holding on to an idea that due to informal constraints set by intra- and extramural researchers was not a good candidate to push for state support for. And that it could stand the pressure for so long, as the natural end to this plan – an entirely privately financed centre with no overwhelming backing from potential inhabitants – would be a massive financial undertaking for the charity and put a strain on its funding practices with grants-in-aid. How could it afford to pursue a not entirely popular idea? Was it waiting for the taste and preferences to change? If so, they actually did. The idea of a centre was re-actualised when the favourable formal institutions and state investments in universities and hospitals were brought to an end by an international financial crisis in the early 1970s.

The oil crisis of 1973 and a subsequent financial depression made changing Danish governments and Folketings of the 1970s try very hard to decrease the massive growth of the public sector. For years, the threat of inflation was getting more and more tangible, and the public sector's increased employment in times lacking available and able workers challenged the private sector²⁷³. The growth had to be stopped, and the political spotlight was cast on the hospital sector. In the 1970s, a new agreement between state, municipalities and the counties led to a county takeover of the financing of Danish hospitals – except for the state-owned Rigshospitalet. The state contribution for hospitals decreased from 65% to 35 % and eventually to 0% in 1975, but at the same time the counties had the mandate to pay the bill through

²⁷³ Ibid., p. 425.

The Cancer Centre That Never Was

increased taxation, and a new law of 1973 made public health insurance mandatory over taxes²⁷⁴. The change of ownership of the hospitals meant that the politically governed counties were now in charge of planning hospital growth which had otherwise been the domain of the hospital doctors who had previously dictated any needs for funding new treatment modalities, building expansions, increase of specialities and bed numbers etc. based on their professional opinion. Now, the county politicians and the Ministry of the Interior led a joint effort to prioritise between those needs in order to control an unviable financial development, and this was far from popular with the medical staff and the electorates who had come to expect continuous expansion and growth of the public sector²⁷⁵. As will be evident in this chapter, the political attempts to cut the budget were almost impossible, and even a suspension of growth was experienced as massive budget cuts by electorate and hospitals.

However, investment in expanding hospitals and their operation were not the only areas to be subjected to political prioritising in order to deal with the financial crisis. Science was a candidate as well. In particular the oil crisis of 1973 made the government pull the reins on the massive investments in science and medicine and start to focus on the very pressing need to find alternative energy sources²⁷⁶. It was a change of attitude towards science and medicine. Research first and foremost needed to be useful and it was considered safer to support strategic research likely to solve the problems at hand than to await the serendipity breakthroughs of pure basic research, as had been the philosophy of Vannevar Bush and his “science push” model.

However, while cancer was undoubtedly a serious health issue, cancer *research* was not a separate priority of the State in addition to what it already appropriated on the state budget to the universities and hospitals where a good deal of the country’s cancer researchers worked, and through grants in aid awarded by the State’s research councils to peer reviewed projects. Since the State takeover of the radium stations in 1962, the State (through the National Budget) had traditionally spent larger sums of money on treatment than on research. But although the 1960s had led to an expansion of universities and hospitals and the emergence of new disciplines and medical specialities, the umbrella-like activities collectively known as cancer research and oncology still had not managed to find footing at these institutes as a separate academic discipline or speciality.

²⁷⁴ Ibid. P. 427.

²⁷⁵ Ibid., p. 428-30.

²⁷⁶ Nielsen, H., K. Nielsen, et al. (1998). Til samfundets tarv - Forskningscenter Risøs historie. Denmark, Forskningscenter Risø, p. 282-283.

The Cancer Centre That Never Was

In 1979, a group of researchers set out to plead the Ministry of Education for more money and recognition for cancer research activities, as the State's National Scientific Research Council (NSRC) appointed a subcommittee to evaluate the basic cancer research done in Denmark and to suggest means to promote and organise this field²⁷⁷. It was hoped that the survey would reveal how the field of Danish basic cancer research measured up to the international standard and whether or not the research area could positively affect cancer diagnostics and treatment²⁷⁸.

Similar surveys of the organisation of Norwegian and German cancer research had already been carried out in 1978, and they in turn seemed to be inspired by the first large-scale cancer research program in the world – the American National Cancer Program of 1971²⁷⁹. A program, that managed to set unprecedented formal institutions in favour of the war on cancer by committing the US government to allocate a massive amount of dollars for the program, increasing from 232 million dollars in 1971 to an impressive 985 mio. dollars in 1977. No other program in the world had ever invested this much in cancer *research*, as most public programs invested in treatment instead. The program had a strong influence on the Danish cancer field and thus deserves special mentioning in the following, before a discussion of the report itself can take place.

3.1 Inspiration from across the pond: the American National Cancer Program of 1971

The program was launched by President Richard Nixon as a “war on cancer”²⁸⁰, and it made cancer research a federal priority as Congress more than tripled its budget for this particular field²⁸¹. The research program was a result of intense lobbying by a group of influential politicians, businessmen, and scientists led by Mrs. Mary Lasker. This group of lobbyists worried about the growing problem of cancer and argued that the State needed to increase its support of cancer research²⁸². Although the American Government allocated more money for cancer research than any other government through its National Cancer Institute, the group argued that the support of coordinated and centralised cancer research was a better investment

²⁷⁷ Forskningsråd, U. f. b. c. n. a. S. n. (1981). Cancerforskning i Danmark, SNF., loose enclosure from the research councils dated 19.02.1982.

²⁷⁸ Ibid., p. 7.

²⁷⁹ Ibid. p. 79-81.

²⁸⁰ On the use of military metaphors on cancer in anti-cancer campaigns, see: Lerner, B. H. (2001). The Breast Cancer Wars. Fear, Hope and the Pursuit of a cure in the Twentieth Century America, Oxford University Press, p. 43-45, p. 268-272.

²⁸¹ Rettig, R. E. (1977). Cancer Crusade. Princeton, New Jersey, Princeton University Press, p. 283.

²⁸² Erdey (1995). Armor of Patience: The National Cancer Institute and The Development of Medical Research Policy In the United States, Case Western University., pp. 154-164.

The Cancer Centre That Never Was

than the massive amounts of money spent on the treatment of cancer. The group believed that a cure for cancer had to be made a national goal and that it could only be found through a state-initiated and coordinated effort; in the same way the government had managed to put a man on the moon through the space program, or had split the atom through the Manhattan Project of the Atomic Energy Commission (AEC)²⁸³. If mankind could reach such fantastic goals, it would surely be able to find a cure for the much more “down-to-earth” problem of cancer by employing the same research management style that had been used in the two successful programs.

The two programs had benefited considerably from having a clearly defined goal, and the space program in particular had simplified the chain of command and bureaucracy by establishing NASA as an independent research agency reporting directly to the President. In other words, a coordinated attack on cancer was not only a question of mobilising science; it was also a matter of organizing the entrepreneurs. President Nixon and the Congress were convinced by the rhetorics of the Lasker-group, and in 1971 the most extensive cancer research program in the world was launched. The National Cancer Institute (NCI) became the “NASA” of this program²⁸⁴, and the Congress generously provided federal funds: the NCI budget was increased from \$ 232 million in the fiscal year of 1971 to \$ 985 million in the fiscal year of 1977!²⁸⁵

The US government created the formal institutions in strong favour of the establishment of a cancer centre as the lead organisation in the war on cancer. A governmental action that can be seen as a response to the private lobbyism of the Lasker-group that had so effectively managed

²⁸³ Garb, S. (1968). Cure for Cancer: A National Goal. New York, Springer Publishing Company, INC, p. 3.

Rettig, R. E. (1977). Cancer Crusade. Princeton, New Jersey, Princeton University Press, p. 78.

Erdey (1995). *Armor of Patience: The National Cancer Institute and The Development of Medical Research Policy In the United States*, Case Western University., p. 157-158.

²⁸⁴ Erdey (1995). *Armor of Patience: The National Cancer Institute and The Development of Medical Research Policy In the United States*, Case Western University., p. 160.

²⁸⁵ Ibid., p. 167 & 189.

For a more detailed account of the development, nature and execution of the American National Cancer Program of 1971, see: Garb, S. (1968). Cure for Cancer: A National Goal. New York, Springer Publishing Company, INC. This book presented the NASA-strategy for cancer research and was used by the Lasker group to convince Congress of their cause.

Breslow, L., D. Wilner, et al. (1977). A History of Cancer Control in the United States, with Emphasis on the Period 1946-1971. Bethesda, Division for Cancer Control and Rehabilitation, National Cancer Institute vol.2 (chapter 8).

Rettig, R. E. (1977). Cancer Crusade. Princeton, New Jersey, Princeton University Press, the entire book describes the Lasker group's lobbyism in detail.

Patterson, J. T. (1987). The Dread Disease: Cancer and Modern American Culture. Cambridge, Harvard University Press, p. 231 et passim.

Erdey (1995). *Armor of Patience: The National Cancer Institute and The Development of Medical Research Policy In the United States*, Case Western University., p. 135-170.

The Cancer Centre That Never Was

to put the cancer war on both the political and the public agenda and thereby push for a change in tastes and preferences; a change of both formal and informal institutions. The National Cancer Program was later severely criticised for its lack of coordination, its foundered research projects, and its use of restrictive funding mechanisms. One of the Cancer Program's projects, the cancer virus project, was specifically designed and funded with the purpose of finding viral causes for human cancers and subsequently developing a cancer vaccine. But while virologists had succeeded in finding many viruses causing cancers in animals, cancer viruses seemed to be responsible for only a small percentage of human cancers²⁸⁶. The cancer virus program ended in 1978 and was much scolded by researchers for its goal oriented design and lack of fulfilment of its chief objective of finding a cure for cancer, as had been the initial promise.

Therefore, the program did not initially yield the positive feedback needed (in the form of medical breakthroughs), nor did it justify its continuance in a broader societal sense. The program did not result in a vaccine against human cancers²⁸⁷, but it did with time yield unexpected insight into the mechanisms of cancerous growth and formed the so-called oncogene-paradigm from the mid-1970s to the mid-1980s, which along with recombinant DNA technology opened new vistas in cancer research and united a century of different endogenous and exogenous theories on the cause(s) of cancers²⁸⁸. That is, it rendered a new understanding of cancer that would open new technological opportunities in cancer treatment too – and in the terminology of Douglass C. North it would bring about a change in relative prices. The new paradigm thus illustrated the important role in cancer research of the basic biological disciplines

²⁸⁶ Morange, M. (1997). "From the Regulatory Vision of Cancer to the Oncogene Paradigm, 1975-1985." Journal of the History of Biology 30: 1-29, p. 7.

²⁸⁷ Ibid., p. 9.

²⁸⁸ In 1969, American scientists Huebner and Todaro suggested that a special cancer inducing gene (oncogene) in *Rous Sarcoma Virus* was able to turn healthy cells carcinogenic. They found that the gene in question was present in a dormant state in all mammalian cells and could be activated by a series of things such as radiation, chemical carcinogenesis, and viral infections. They speculated that the presence of the genes in mammalian cells was due to viral infection. Nevertheless, from 1976-1984 another team of researchers - Bishop and Varmus – used recombinant DNA technology to prove the theory wrong. They screened healthy cells with a synthetic viral oncogene probe and found that the sequence of the mammalian version of the gene did not completely resemble the viral one. As a consequence, they proposed the theory (now known as the oncogene paradigm) that the so-called oncogenic genes (oncogenes) were in fact *normal* cellular genes that controlled the cell cycle and were only found in viruses due to some primordial transfection. In theory, any of the events proposed by Huebner and Todaro could disturb the regulatory function of this class of genes (now called proto-oncogenes) and result in cancerous growth.

For more on the development of the oncogene paradigm, see:

Michael, B. J. (1996). "The discovery of Proto-Oncogenes." FASEB Journal: 362-364, which is a scientist's own account of the process.

Helvoort, T. v. (1999). "A Century of Research into the Cause of Cancer: Is the New Oncogene Paradigm Revolutionary?" History and Philosophy of the Life Sciences: 293-330, who as a historian of science discusses the content and development of the oncogene paradigm compared with the myriad of theories on cancer causation during the 20th century.

The Cancer Centre That Never Was

– such as molecular biology – that had emerged as a discipline at universities worldwide during the 1950s and 1960s.

Meanwhile back in Denmark, it was noticed that the American cancer program's idea of cancer research as a federal responsibility bore witness of an institutional matrix with new opportunities for cancer organisations in the war on cancer, and this was particularly attractive to a group of cancer researchers in Denmark in the late 1970s, who in times of recession and minimal state support for science in general wished to make their research area an extraordinary priority of the State and perhaps thereby get the stamp of approval by instituting the cancer field as an independent academic discipline and medical speciality with a separate budget on a par with the well-established and prestigious fields from which the cancer activities and oncology practice originated.

When a member of the government's Natural Science Research Council (NSRC) – Professor Niels Ole Kjeldgaard – suggested a state-financed cancer survey, the initiative was given a warm welcome. As many other Danish molecular biologists, Kjeldgaard had been working on prokaryotes (single cell organisms) until the late 1970s when he chose to switch to the study of eukaryotes (multi-cell organisms) – and in particular the carcinogenic effects of viruses on animal and human cells²⁸⁹. Being a stout defender of scientific autonomy and the “science push” model, the university professor used his time in the NSRC to promote organisational initiatives that would improve the conditions for *basic research*²⁹⁰. He had likewise lobbied for Danish participation in the establishment of the European Molecular Biology Laboratory (EMBL)²⁹¹, and it may have seemed natural to him to try to improve conditions for his other interest, basic cancer research, as well. Judging by his involvement in such projects, Kjeldgaard clearly had an interest in politics and the administration of science, and it was thus no surprise that it was he who initiated and led the work of the NSRC subcommittee whose report was later referred to as “*the Kjeldgaard Report*” which was about to re-actualise the formal institutions created by the former Minister of Education Hartvig Frisch in the late 1940's with the establishment of the Fibiger Laboratory.

²⁸⁹ Pedersen, F. S. and J. Justesen (1993). "Reguleringsmekanismer gennem 25 år: Fra bakteriers magiske pletter til pattedyrs magiske gener". *25 År: Institut for Molekylær Biologi*. O. F. Nielsen. Århus, Institut for Molekylærbiologi: 14-19, p. 15.

²⁹⁰ Interview with Niels Ole Kjeldgaard 02.12.2004.

²⁹¹ On the discussion of Danish membership of the EMBL, see Forskningsråd, S. N., S. L. Forskningsråd, et al. (1979). Danmark og Det Europæiske Molekylærbiologiske Laboratorium. København, SNF, SLF, SJVF: 43..



Prof. N.O. Kjeldgaard

3.2 Scientific logic shoots for institutional change in the cancer field

It is important to note that the Kjeldgaard Report's analysis of cancer research (and its attempt to re-actualise and expand the formal institutions created by Hartvig Frisch) was initiated by a man driven by a basic science professional logic rather than a clinical one, as this habitus affected the Report's impact on the Danish cancer entrepreneurs, their abilities to co-operate and utilise the organisational opportunities of the institutional matrix the Report pushed for. And why? As mentioned in the above, the basic biological disciplines gained a stronger footing in the research activities commonly known as cancer research with the emergence of recombinant DNA technology and the discovery of oncogenes and their biological effects. The idea that basic science could deliver knowledge about the molecular aetiology of all cancers was a breakthrough that opened new vistas in the entire cancer research field, and it made a lot of basic scientists, such as Kjeldgaard, switch to a field which they otherwise regarded as being dominated primarily by physicians. Historian J.H. Fujimura calls this world wide influx of basic scientists (especially molecular biologists) a "molecular bandwagon of cancer research", and a gradually increasing number of medical researchers also jumped onboard this bandwagon when they – perhaps after some initial reluctance – had become convinced of the merits of the molecular techniques and wanted to employ them in their own work²⁹².

Some more traditionally minded medical researchers did not share this enthusiasm, though. They felt that the newcomers held different and incompatible views on the nature of cancer research. Perhaps because of their young age and affiliation with the democratisation of the

²⁹² On the spread of molecular biology methods in cancer research, see: Fujimura, J. H. (1988). "The Molecular Bandwagon in Cancer Research: Where Social Worlds Meet." *Social Problems*: 261-283. Morange, M. (1997). "From the Regulatory Vision of Cancer to the Oncogene Paradigme, 1975-1985." *Journal of the History of Biology* 30: 1-29, p. 11.

The Cancer Centre That Never Was

Danish universities, they often also promoted different ideas on science organisation than what medically trained cancer researchers were used to. To a basic scientist from the universities, the autonomy of science, the solving of scientific riddles (e.g. what turns a cell carcinogenic), the understanding and production of exact data and theory, the elucidation of causation correlations and mechanisms, and evaluating the quality and impact of the research done via (international) peer review were central to his or her work within the cancer field. The concerns for the individual cancer patient and clinical trials, on the other hand, were not part of this everyday work. All in all, these priorities were somewhat different from those of the professional group that had previously dominated cancer research: the physicians.

This has been identified on the basis of the Kjeldgaard Report as this report is the only official report in which cancer researchers reflect upon their own field with regard to e.g. the content of basic cancer research²⁹³, their definition of basic cancer research as “investigations of biomedical, physiological and genetic mechanisms that affect the development of cancer and the spread of cancer cells” – an activity which the report separates from clinical cancer research (defined as “studies with direct relation to the diagnosis and treatment of cancer patients”) and epidemiological cancer research (“studies of the occurrence and distribution of cancer in the public”)²⁹⁴. Likewise the claim that basic scientists prioritise the autonomy of science and quality control through peer review is based on their own recommendations in the Kjeldgaard Report that, as will be evident below, showed that all the best research had been subjected to peer review, secured funds in free competition, and was financed through grants-in-aid²⁹⁵. Because the Kjeldgaard Report addresses many of these issues directly, it is considered the most important source to illustrate the basic cancer researchers’ aforementioned views and habitus/professional logic, although the interviews conducted with basic researchers support the claim that they held such views.

But whereas basic scientists saw science as an international activity that needed to be conducive and reproducible regardless of geography and the individual researcher, the practice of medicine and clinical research had a social and more local dimension. In contrast to the basic and clinical scientists working within academia, the work of most hospital clinicians and researchers was at least to some degree shaped by an external goal: the treatment of patients. The priority given to solving narrow and predefined clinical research problems that followed from the patient

²⁹³ Forskningsråd, U. f. b. c. n. a. S. n. (1981). *Cancerforskning i Danmark*, SNF., p. 19-31.

²⁹⁴ Ibid., p. 41.

²⁹⁵ Ibid., p. 94-95.

treatment was thus mirrored in the professional medical logic and habitus that shaped their everyday decisions. As mentioned in chapter 1, the medical community was historically built around a hierarchical structure of medical specialities and seniority that differed from the flat organisational structure of the newly democratised universities in which even young staff with tenure had influence on a par with professors. The work of physicians required contact with the patient wards, and physicians and medical researchers could not easily be moved away from the hospitals for cross-disciplinary collaborations, and they tended to favour the type of organisation found where they had been trained and worked²⁹⁶.

These were some of the reasons why the two groups held different views on the nature of cancer research and its structural organisation. As will be evident in this and the following chapters, these different views were not always compatible in e.g. the construction of collaborative efforts between the different groups. But while the new role of the basic biological sciences in cancer research was not unproblematic for all in the cancer community, it was a historically important condition for a member of the Danish Natural Science Research Council – the molecular biologist N.O. Kjeldgaard – to initiate and lead a survey on Danish cancer research in the late 1970s.

3.3 Findings and conclusions

The NSRC subcommittee consisted of members of the NSRC, the State's Medical Research Council (MRC), the Danish Cancer Society, and the Carlsberg Foundation. Its goal was to find out the extent and variety of *basic* cancer research in Denmark from 1970-1979, how it was financed, by whom it was done, and what could be done to promote it in the future²⁹⁷. Because the Report was on basic and *not* on general cancer research (including clinical activities), the representatives from the MRC and the NSRC were not protecting their own domain, so to speak, but they were working together on improving just the one domain on its own terms. They worked to survey the quality and organisation of *basic* cancer research areas to find out whether or not the scientific programs and/or the organisational structures were up to code or needed improvements. However, because the MRC never initiated a separate survey report on clinical cancer research, the Kjeldgaard Report became the only (and authoritative) report on cancer

²⁹⁶ This will be evident in chapter 4 which describes the efforts to establish a comprehensive cancer centre. In a discussion on under whose management to place the Society's research units in this centre, the basic cancer researchers tended to favour the university while the clinician favoured Rigshospitalet, see: Report from the MRC-working group: "*Redegørelse til Undervisningsministeriet vedrørende en samordning af den basale onkologiske forskning i hovedstadsområdet*", October 1984, *Personal Papers of Ole Bang*, (Copenhagen), p. 30.

²⁹⁷ Forskningsråd, U. f. b. c. n. a. S. n. (1981). *Cancerforskning i Danmark*, SNF.c, p. 85.

The Cancer Centre That Never Was

research in general and its focus on basic (molecular biology) research thus influenced the umbrella-like definition of cancer research in the cancer community e.g. the Danish Cancer Society, as will be elaborated on below. It was the only state-initiated survey on any part of the cancer field and it therefore must have held some importance in the cancer community regardless of clinical or basic persuasion, as it was the first document to remotely rubberstamp the diverse cancer field as an independent field; a first step towards setting the formal institutions in favour of state-support to and recognition of cancer research in general.

The NSRC subcommittee, which was led by Kjeldgaard, consisted of the following members:

Table 3.1 Subcommittee members/authors of the Kjeldgaard Report:

Name	Scientific Institution	Additional institutional affiliation:
Professor Niels Ole Kjeldgaard	Department for Molecular Biology and Plant Physiology, Aarhus University	- Member of the NSRC (until 1981) - Chairman of the NSRC- subcommittee - Since 1981, member of the Executive Committee of the Danish Cancer Society.
Professor S.O. Andersen	Lab for Zoo-physiology, University of Copenhagen.	- Member of the NSRC
Professor Hans Klenow	Biochemistry Department B, Copenhagen University.	- Member of the NSRC (before 1981)
MD Nis I. Nissen	The Finsen Institute, Rigshospitalet	- Member of the NSRC
MD Ove Sten-Knudsen	Biophysical Dep., University of Copenhagen	- Member of the NSRC (before 1981) - Prev. member of the Cancer Society's Executive Committee
Professor MD Viggo Faber	The Epidemiology Department, Rigshospitalet	- Member of the MRC
Professor Jens F. Rehfeld	The Biochemical Department, Aarhus University	- Member of the MRC
Professor MD Mogens	Rigshospitalet	- Chairman of the Danish Cancer Society until 1981 (replaced by Professor MD Steen)

The Cancer Centre That Never Was

Andreassen		Olsen from Aarhus University)
MD. C. Crone	Rigshospitalet	- Appointed by the Carlsberg Foundation
MD Keld Danø	The Laboratory of Tumour Biology, Rigshospitalet	(functioned as secretary to the subcommittee)
MSc Jesper Zeuthen		(functioned as secretary to the subcommittee)

The analysis was done by sending out questionnaires to researchers at hospital departments, universities and other research institutes all over the country; and on the basis of the returned answers, the NSRC subcommittee concluded that 114 researchers had worked on basic cancer research in the time span in question. The project lines of these nine years could be divided into nine subgroups which reflected the breadth of Danish basic cancer research²⁹⁸:

- 1) Experimental medical treatment of animals.
- 2) Experimental radiation therapy of animals.
- 3) Other experimental treatment of animals.
- 4) Tumour biology.
- 5) Tumour virology.
- 6) Tumour immunology.
- 7) Chemical carcinogenesis.
- 8) Physical carcinogenesis.
- 9) Other experimental cancer research.

Some of the research groups were very active and internationally renowned²⁹⁹. They were, however, often very small and geographically isolated from each other at different institutes. And while the privately-owned research units of the Danish Cancer Society were totally dedicated to the study of cancer, cancer research at the publicly financed research facilities (e.g. universities and hospitals) was mostly done in laboratories or departments primarily concerned with well-established disciplines such as molecular biology, pathology, and cell biology. This was a fact that interested the NSRC subcommittee:

²⁹⁸ Ibid., p. 45.

²⁹⁹ Ibid., p. 15.

The Cancer Centre That Never Was

This [the conduct of cancer research in departments for other bio-disciplines] is valuable because it gives basic cancer research a very broad contact face to other biological disciplines, which is essential in order to obtain an understanding of the specific biology of cancer cells; but the system also has a series of conspicuous flaws: the research groups tend to be very small – consisting of one or two persons only – and this can easily result in a suboptimal use of resources. It makes it more difficult to establish a stimulating research environment with a primary interest in cancer problems.³⁰⁰

The often very rigid departmental structures of the universities rendered cancer research a fragmented discipline studied at many different departments with the resulting duplication of efforts, personnel, equipment, space and funds. This was also the case with anti-cancer activities at the hospitals, where oncology was not yet a separate medical specialty and was therefore not affiliated with the status of well-established specialities in the medical world. And the lack of research time at the hospitals made it a voluntary activity that implied a great deal of personal sacrifice on the part of the researcher. For these reasons, many cancer researchers tended to concentrate on small problems that did not require collaborative work or extensive facilities.

In the opinion of the NSRC subcommittee, this did not indicate the wealth of fruitful research milieus they could have hoped for, and to make matters worse, the submitted questionnaires showed that only *half* of the 114 researchers spent all their working hours on cancer problems *per se*. The majority of cancer researchers at universities and hospitals were burdened with time-consuming teaching duties and administrative work and could not focus specifically on cancer research like most of their colleagues at the private research institutes, see figure 3-1. The majority of cancer researchers at hospitals and universities specified that they could reserve no more than two hours a day for cancer research, and this worried the members of the subcommittee much as it had worried Engelbreth-Holm more than 35 years before.

³⁰⁰ Ibid., p. 87.

The Cancer Centre That Never Was

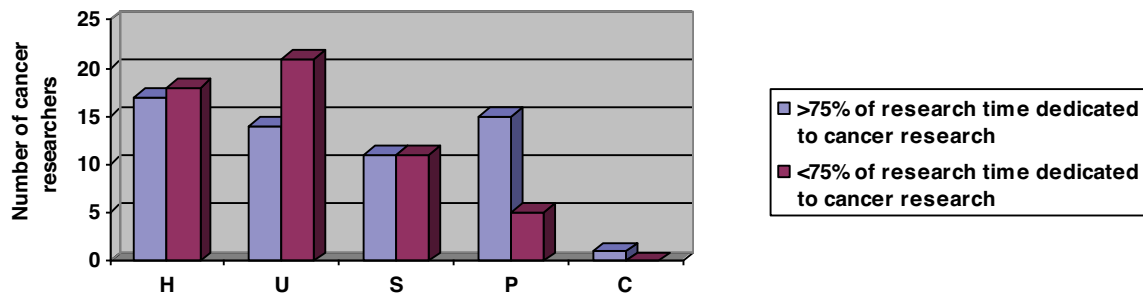


Figure 3-1: Illustration of the time spent on cancer problems by researchers at different types of research institutions. [H]= hospitals, [U] = universities, [S] = other state institutes (e.g. The Danish Food Institute and dental colleges), [P] = private research institutes, [C] = commercial laboratories.
Source: (Forskningsråd, Udvalg for basal cancerforskning nedsat af Statens naturvidenskabelige 1981).

According to the subcommittee, the pressure of time was reflected in the publication activity of the cancer researchers. After bibliographical analysis, the committee members concluded that about 46 % of these researchers had a low publication rate with only one or no cancer-related publications from 1970-1979³⁰¹. If the rate could be considered a good indicator of a research project's scientific activity, as the authors of the Kjeldgaard Report believed it could, it painted a depressing picture of Danish basic cancer research³⁰². In addition to this, the committee members had studied the number of times the different Danish cancer publications had been cited internationally, and they learned that publications from hospitals and universities were generally cited more often than those from the Cancer Society's private research institutes, see table 3-2.

³⁰¹ Ibid. p. 58.

³⁰² On the methodological challenges of the application of citation analysis for assessing cancer research performance in relative small or scientifically peripheric countries, such as Denmark, Norway, Sweden and Finland, see: Luukkonen, T. (1989). "Publish in a visible journal or perish? Assessing citation performance of nordic cancer research." *Scientometrics* 15: 349-367. This study reveals a wealth of different approaches and factors that needed to be considered in citations studies when assessing citation performance, because the distribution of citation is often skewed. Luukkonen points to different factors that may affect the number of times a publication will be cited, such as the status, language, gender, and networking-abilities of the authors and the visibility of the journal they have published their articles in. The Kjeldgaard Report does not seem to have taken all of these considerations into account when analysing the publication patterns of the Danish cancer researchers, although the use of citation analysis and impact evaluations are clearly tools in accordance with the scientific logic of the Report's authors.

The Cancer Centre That Never Was

Table 3-2: Overview of the basic cancer research activity (time spent, funds spent, publications etc.) at different Danish institutes.

	Scientific staff 1977-79	Project lines 1977-79	Total financing* 1977-79	Publications 1970-79	Citations 1979
	Man year/year	Number	millions DKK/year	Number	Number
Hospitals	4,4	24	2,8	81	160
Universities	10,8	27	5,5	158	517
Other State institutes	6,4	14	2,4	17	13
Private research institutes	11,5	16	5,5	78	99

Note: *The yearly total of external and internal grants spent on basic, laboratory-based cancer research.

Source: Forskningsråd, U. f. b. c. n. a. S. n., Cancerforskning i Danmark, SNF, (1981).

Did this mean that the research done in the public hospitals and universities had a greater scientific impact than that of the private research institutes? The subcommittee avoided making explicit statements about this, although figure 3-2 seems to indicate so. In spite of teaching and administrative duties, publicly-employed cancer researchers were more productive than their colleagues in the private Cancer Society. It was noted, however, that the staff of research institutes that chose to finance their research activities through *project-oriented grants-in-aid* or *discretionary funds* rather than through the institutes' core budget seemed to have higher publication intensity than others³⁰³. And this raised interesting questions: was there a correlation between the two? And could one funding model bring about more value for money than others?

3.4 Financing Danish cancer research

At the time of the NSRC survey, the Danish funding system for cancer research was tripartite. In theory, a single cancer-related research project could receive financial support from both the core budgets of the hosting organisation/institute, grants-in-aid from the States' medical and/or natural science research councils (MRC, NSRC), and from a few private foundations and cancer charities, of which The Danish Cancer Society was the largest. A few prominent researchers were fortunate enough to secure funds from the American National Cancer Institute as well, but

³⁰³ Forskningsråd, U. f. b. c. n. a. S. n. (1981). Cancerforskning i Danmark, SNF. p. 60-61.

The Cancer Centre That Never Was

far from everyone was blessed in this way. An average research group would hope to receive financial backing to cover expenses for e.g. staff salaries, running costs, and equipment through the core budget of the research institute which was financed by the “owner” of the institute – either the State/county/municipality or the Danish Cancer Society. The research group would then have to apply for additional project-oriented grants to cover the remaining costs of their research activities through the MRC, the NSRC, and/or the Cancer Society where grants were awarded through a biannual peer-reviewed process. These funding organs tried to coordinate their activities so that the grants would be distributed without inappropriate overlaps.

As shown in figure 3-1, the Danish medical industry did not take much of an interest in basic cancer research, and although the NSRC subcommittee regretted the lack of industrial support, it found the tripartite funding system satisfactory as it gave cancer researchers more than one chance to secure funding. If they had been turned down by one of the three organs, they could always turn to another³⁰⁴. On the other hand, this was only true in times when there was enough money for all qualified research projects which was not the case in Denmark throughout the 1970s and the 1980s. The subcommittee’s report stated that the total financial allocations for basic cancer research in 1977-79 had been an average of 16.2 million DKK/ year (of which 12.7 million DKK /year accounted for internal financing, and the 3.5 million DKK/ year was allocated through external project oriented grants-in-aid)³⁰⁵. The public sector financed about 59 % of the 16.2 million while the private Cancer Society managed to procure the remaining 41%³⁰⁶.

With some concern, the subcommittee noted that a large portion of the allocations was earmarked for specific purposes. It had been a tradition in Denmark to cover most of the costs for research materials and equipment through the state-financed core budget of the universities, but the subcommittee noted that this tradition had gradually been phased out and funds were now being tied down for salaries instead. Unfortunately, this had happened without a corresponding increase in the external project-oriented grants from the national research

³⁰⁴ Ibid.c, p. 88.

³⁰⁵ Ibid.c, p.47 et passim.

As mentioned in the introduction, it was very difficult to find the exact amount of money spent by the research councils/state & the private foundations on cancer research. This was also a problem for the NSRC subcommittee, but they based their estimates on the returned questionnaires in which cancer researchers were asked to inform the subcommittee of the size, type and source of funding (see Forskningsråd (1981), p. 114.). It has not been within the scope of this dissertation to send out similar questionnaires.

³⁰⁶ The financial responsibility of the Danish Cancer Society was 50% if one looked at the external financing – project oriented grants – alone.

councils and the Danish Cancer Society. In short, this meant that the free project-oriented grants paid for equipment and that there was less money for actual cancer experiments!³⁰⁷ A similar development was identified in the private sector where substantial amounts of funds were being tied up in e.g. the physical buildings for the research units of the Cancer Society. This was indeed an unfortunate development, and though the Society had increased its available appropriations for cancer research due to an extraordinarily good anniversary collection in 1978, the changed funding practices forced researchers to spend more and more time away from the laboratory writing grant applications. The subcommittee suspected that this had prevented the growth of fruitful basic cancer research milieus, and although the objective of the Report had not been to survey clinical and epidemiological cancer research, Kjeldgaard estimated that the same was true for these fields³⁰⁸.

3.5 The recommendations

Having concluded that most cancer research in Denmark was done *in spite* of poor working conditions, that the effort was generally too uncoordinated, and that only about 15-20 of the Danish cancer researchers were of international standard, the NSRC subcommittee was faced with a difficult question: Was it really worth it? Should Denmark conduct cancer research despite its small size and modest results, or should it focus its efforts elsewhere and just await the results of scientifically weightier nations such as the United States and the United Kingdom? Kjeldgaard's attitude seemed to be that Denmark *must* invest in cancer research and education in order to understand and apply the latest international results. But while an international breakthrough in the knowledge of oncogenes and their role in the development of cancer seemed to be within reach, no one could *guarantee* research driven progress in a small country like Denmark. However, Kjeldgaard argued that serendipity breakthroughs in cancer research could just as easily happen in a Danish laboratory as in an American one, and they would surely come only to those who dared to put something at stake by supporting research³⁰⁹. Last but not least, other representatives of the scientific community argued that Denmark should continue its efforts within the cancer field because research was the very backbone of the Danish educational

³⁰⁷ Forskningsråd, U. f. b. c. n. a. S. n. (1981). Cancerforskning i Danmark, SNF., p. 88.

³⁰⁸ Kjeldgaard, N. O. (1982) "Hvad skal der ske med kræftforskningen i Danmark?" Jyllands-Posten 02.03.1982, p. 9.

The combined yearly allocations for these fields was about the same as for basic cancer research.

³⁰⁹ Ibid.

The Cancer Centre That Never Was

system³¹⁰. But in particular, the authors of the Kjeldgaard Report used *socio-economic* arguments as a strategy to appeal to the lay government:

(...) the public expenses for cancer research can reasonably be compared to the 1500 million DKK/year that is spent on the treatment and hospitalisation of cancer patients³¹¹

In other words: it pays to invest in science! On this point it is evident that the Kjeldgaard Report reflected a scientific logic as it argued that progress in the fight against cancer was most likely to come from the laboratories; thus trying to expand the institutional matrix to improve the opportunities for scientific organisations in the cancer field. This logic was also reflected in the Report's recommendations. In the cancer survey questionnaires sent out by the subcommittee, the individual cancer researcher was asked to propose organisational and/or financial initiatives that could help promote and mobilise Danish basic cancer research. Although the answers were manifold, the researchers seemed to agree that a few initiatives might be able to improve their daily working conditions. These initiatives turned out to be in *complete* agreement with the recommendations of the Report's authors, who had spent months collecting and analysing data on the state of Danish cancer research. They were as follows:

- 1) Make basic cancer research a priority of the NSRC and the MRC.
- 2) Increase allocations for cancer research in the form of free, temporary and project-oriented grants to the most valuable, relevant, and efficient research projects. This could be facilitated through the establishment of a State cancer research fund, intended to award grants via the peer review process to the best projects only.
- 3) Establish comprehensive cancer research centres in connection with the hospital oncology centres and the universities in Copenhagen, Aarhus, and Odense. (In contrast to the single national centre proposed in the 1940s, the Report now recommended several centres at the country's province medical faculties that were not fully established in the 1940s. But now there was an academic infrastructure to support more than one centre.)³¹²

³¹⁰ Henningsen, I. (1982). "Flere spørgsmål end svar." *Naturkampen*: 20-23, p. 21.

Christiansen, J. (1982). "Cancerforskning i Danmark." *Ugeskrift for Læger* **144**: 815-816, p. 816.

³¹¹ Forskningsråd, U. f. b. c. n. a. S. n. (1981). *Cancerforskning i Danmark*, SNF., p. 14.

³¹² This recommendation may have been due to geopolitical concerns. Kjeldgaard himself was a professor at Aarhus University, and there was some competition between the original Copenhagen University and the later established ones in the province, as demonstrated during the negotiations for the establishment of the faculty of science at Aarhus University that was only reluctantly accepted by some Copenhagen professors in the 1950s and 1960s. See, Nielsen, H. (2004). *Disse fag må lempes til verden... - Oprettelsen og udbygningen af Det Naturvidenskabelige Fakultet ved Aarhus Universitet*. Gylding, Aarhus Universitetsforlag, p. 25.

The Cancer Centre That Never Was

- 4) Strengthen pre- and postgraduate training in clinical *and* biological aspects of oncology at the universities.
- 5) Recruit more promising researchers to do cancer research by offering special long-term cancer research scholarships³¹³.

The first recommendation was to make cancer research a special priority of the Danish research councils, which would require a change of the formal institutions. This could be done through a change of practice in the councils' grant awarding activities, but perhaps more importantly through their function as the government's political advisory boards. If the research councils succeeded in making cancer research a special governmental priority – much as the search for alternative energy sources had become after the oil crisis in 1973 – the subcommittee would have come a long way in re-actualising and expanding the formal institutions created in 1949. The recommendation and the desire to change the existing institutional matrix was clearly inspired by such change in the US, i.e. the American National Cancer Act of 1971, which made cancer research a federal responsibility. However, making the cancer problem – or any research problem – a special priority of the Danish government was quite difficult.

Denmark was late in catching on to the research policy recommendations made by the OECD in the 1960s. Such recommendations stated that the governments of the OECD countries should play a more active part in the management and development of research policies for a more efficient use of science and its results, but this was not on the political agenda in Denmark until the 1980s, and even then, the Danish research system did not seem geared to it³¹⁴. There was no effective coordinating political organ, and Danish research policy was thus “characterised by pluralism in the three main sectors - academic research, research in the public sector or at government institutes for applied research [in Danish: *sektorforskning*], and the technological service system - without any notable political coordination”³¹⁵. One of the main problems was that there was no autonomous ministry for research until 1993³¹⁶. The lack of transverse coordination and research policies made it more difficult for the small Danish nation to initiate

³¹³ Forskningsråd, U. f. b. c. n. a. S. n. (1981). *Cancerforskning i Danmark*, SNF., p. 98.

³¹⁴ Jensen, B. L. (1996). "Dansk forskningspolitik - fra finkulture til national strategi." *Økonomi og Politik*: 30-39, p. 31.

³¹⁵ Ibid. p. 33.

³¹⁶ Hansen, H. F. (2002). "Hvilken slags politik er forskningspolitik?" *Økonomi og Politik* 75: 41-56, p. 49.

From the mid 1980's, several attempts were made to stem this so-called “sectorialisation” of the Danish research system: In 1986, the government established its first research board. In 1987, the Minister of Education was made Minister of Research as well. In 1993, the first actual Ministry for Research was established. In 1995/1996: a common law of sectorial/non-academic and publicly financed research institutions was passed.

The Cancer Centre That Never Was

strategic research projects in the public sector or at government research institutes as compared to larger nations, because the individual ministries often did not have the necessary capacity to initiate research programs in special research areas³¹⁷.

The process was even more complicated if the prioritised area did not fall naturally under the aegis of one ministry alone – such as the Ministry of Health or the Ministry of Education – but called for a cross-ministerial collaboration. All too often, the different ministries were averse to giving up influence over the specific research efforts they had traditionally controlled and financed through their own special ministerial pool funds, and their culturally different approaches to the question of research were thus reflected in their everyday administration of cross-disciplinary and poly-ministerial pools and programs³¹⁸. This unfortunate rigidity in the way Danish research was managed on the administrative level strongly impeded the possibility of ministerial collaboration, and in the words of the government officer of the Danish Ministry for Research, Bjarne Lundager Jensen:

The traditional pluralistic or sectorial/ministerial organisation of the Danish research system has, however, had a difficult time responding to the politicians' demand for more efficient resource utilisation of the public research and development effort.³¹⁹

Nevertheless, an administrative unit that functioned as secretariat for the six research councils aimed at overcoming these problems by co-ordinating the various research administrations in order to facilitate cross-ministerial projects for the benefit of society³²⁰. As cancer was considered a serious problem for the Danish society, cancer research seemed like an obvious candidate for such coordinated effort. To this end, the NSRC subcommittee suggested that a special State cancer research fund be set up (recommendation number 2). Again, this recommendation necessitated changes at the ministerial level which were required to carry out most of the Report's recommendations and change the institutional matrix towards prioritising and funding cancer research.

This proposed change was by far the most difficult to carry through because of its inherent implications on the ministerial and cross-ministerial orchestration of research programs and

³¹⁷ Larsen, P. O. (1981). *Forskningspolitik i et lille land*, Forlaget Rhodosp. 111.

³¹⁸ Jensen, B. L. (1996). "Dansk forskningspolitik - fra finkulture til national strategi." *Økonomi og Politik*: 30-39, p. 32. It is *not* within the scope of this dissertation to provide an in depth analysis of the structure of the Danish political system and/or its funding mechanisms. The brief descriptions given in this chapter are only included to provide the background for the actual topic of this thesis – the cancer centre that never was.

³¹⁹ Ibid., p. 31.

³²⁰ Larsen, P. O. (1981). *Forskningspolitik i et lille land*, Forlaget Rhodos, p. 185.

The Cancer Centre That Never Was

science policy, as it required the different ministries to lay aside internal ministerial power-struggles, to collaborate and to pool funds into a cross-ministerial cancer fund. The ministries were essentially asked to channel their influence on science policy and strategic funding into the research councils and the cancer fund's administration: a transferral of authority. The proposed cancer fund was supposed to consist of a board of cancer experts that would be appointed by the research councils but did not necessarily have to be members of these organs. The idea was to let these experts identify new and promising areas within the cancer field that needed special attention. In this way, the experts would review projects and award multi-annual grants for promising long-ranging and extensive cancer research programs which exceeded the limits of what the research councils were normally able to finance with their limited budgets grants³²¹. Thus, the experts would have the authority to shape a more flexible Danish cancer research policy by identifying specific research areas in need and initiating research programs, and by terminating them if they were not up to the standard. The expert board would have to coordinate its funding activities with those of the Danish Cancer Society, the MRC and the NSRC to avoid overlaps. The subcommittee estimated that the fund would need an initial capital of DKK 5 million a year for both basic and clinical cancer research, and that this amount was not to be given at the cost of other medical research areas³²². Nor was the establishment of a fund intended to relieve the NSRC and the MRC of their responsibility to support regular cancer research projects.

These first two recommendations of the Kjeldgaard Report were clearly inspired by the US efforts in organising cancer research. As mentioned above, the support and management of cancer research was considered a federal duty in the US, and the idea of a State cancer research fund in Denmark seems to be an attempt to make the Danish State play a similar role with similar formal institutions. Even compared to other European countries in which private cancer charities financed the majority of all cancer research, public investment in Danish cancer research was relatively low, and if the recommendations of the Report were put into practice, the financial and political conditions for Danish cancer research would be greatly improved.³²³ But when the Report was finally published, the chairmen of the MRC and the NSRC endorsed the recommendations with some reservation:

³²¹ It is not clear from the Report to which degree the experts would identify these areas on their own (top-down) and to which degree they would consider potential suggestions from the researchers themselves (bottom-up).

³²² Forskningsråd, U. f. b. c. n. a. S. n. (1981). *Cancerforskning i Danmark*, SNF., p. 95.

³²³ Ibid., p. 84. The relative contribution in DKK/inhabitant: Norway (4.2), Denmark (4.3), Sweden (5.4), England (5.7).

The Cancer Centre That Never Was

The councils recommend that the recommendations of the report be put into action, but the councils must express reservation towards the idea of the establishment of a State cancer research fund. The reservation is tied to the concern that the financial means for such a fund could be taken from already existing research funds.

In case such a fund is established, it must take place with an expansion of Danish cancer research in mind and with new and additional funds, given that the fund (...) must be in charge of the implementation of larger, multi-annual projects which are difficult or impossible to finance at the moment.

It must be stressed that the sums set aside by the research councils for basic cancer research are the maximum of what can be allocated for this research if the remaining research within the area of responsibility of the councils must be catered for to an acceptable extent.³²⁴

The two chairmen found it necessary to emphasize these points in a loose leaf attachment to the Report even though the exact same point was explicitly stated in the Report itself. The chairmen had probably learnt from experience that cancer research had never been a financial priority of the Danish State – here meaning the Ministry of Education and the Ministry of Health – and that it was not likely to ever be so. Any funds for cancer research would thus not be additional to the existing state support for research in general, but rather a re-distribution at the cost of other worthy non-cancer areas. And the chairmen were not alone in their suspicion towards the State's methods and the outlooks for obtaining additional funding with the use of arguments favouring applicable science. The State had traditionally focused more on the *treatment* of cancer than on cancer *research*, and it was a common perception in the cancer community that the State had even used the financial capacity of the Danish Cancer Society as a pretext for continued "inaction" in this field.³²⁵

Even back in 1979, the then chairman of the Danish Cancer Society, Dr. Mogens Andreassen, questioned the political interest in supporting cancer research – and making the organisational changes needed to follow the Report's recommendation – by stating that there were other ways of helping the anti-cancer cause than through the research councils or as special posts through the State Budget:

If the politicians wanted to help us [the Danish Cancer Society, eds.], they could do so by making the testamentary donations which are earmarked for us tax-free – that is completely free of the 12 % inheritance tax.³²⁶

³²⁴ Kildeberg et al. (1982). (loose leaf attachment to the Kjeldgaard Report)

³²⁵ Kjeldgaard, N. O. (1982). "Kræftforskning er for spredt og bør styrkes i offentligt regi." Forskningen og Samfundet 8(2): 6-7.

Henningsen, N. (1979). "Efter et kræftår." Ugeskrift for læger 141(3): 181-184 p. 181.

Olsen, S. (1982) "Er indsatsen i kræftforskningen tilstrækkelig?" Politiken København 15.02.1982.

³²⁶ Henningsen, N. (1979). "Efter et kræftår." Ugeskrift for læger 141(3): 181-184, p. 181.

The Cancer Centre That Never Was

But whereas Andreassen had questioned the very willingness of the politicians to help fight cancer, the two chairmen of the research councils might even have feared this political willingness. Whereas it was probably very unlikely that the ministries would ever give up power and influence by establishing new formal institutions in the form of a heavily financed cancer fund, few politicians would dare to be openly averse to the idea of making cancer research a priority of the State, but they would be pressed to find “new” money for the initiative in a time of budget cutbacks. A political initiative to make cancer research a special priority would thus be in danger of becoming either an empty gesture or an unfair redistribution of the scarce research funds available at the cost of other worthy research areas within the existing institutional matrix of ministerial domains and power struggles. It ended up a shuffling of existing funds and programs. Then again, there was always the odd chance of success as seen in other countries. As such, the proposed cancer centre and fund may have challenged the existing research disciplines and medical specialities on their funding and traditional hierarchy as they called for re-structuring across organisations and funding practices.

According to the Kjeldgaard Report, rising cancer-related mortality rates and the hope that cancer research would soon elucidate the biology of cancer slowly made some of the European governments increase their contributions for cancer research as they began to focus on different ways of organising this field in the wake of the American cancer program of 1971³²⁷. Therefore, the recommendations of the NSRC subcommittee were statements of hope that the Danish government would follow suit. This in spite of a serious lack of thorough documentation in the report of the alleged European development. But even if the government did follow suit, the channelling of new funds into cancer research projects would not be enough. The Kjeldgaard Report argued that there was a need for a profound organisational and educational restructuring of the Danish cancer research enterprise which was characterised by many small and uncoordinated research efforts in futile or even weak research milieus scattered all over the country. According to the Report, something had to be done – but what?

The Report itself was the first ever attempt to analyse the status, goals, financial means and future organisation of a large biomedical research area³²⁸. And although every single one of the researchers who had filled out the cancer survey questionnaires seemed to agree that there was a definite need for a more appropriate national cancer research coordination, no *Danish* science

³²⁷ Forskningsråd, U. f. b. c. n. a. S. n. (1981). *Cancerforskning i Danmark*, SNF., p. 84.

³²⁸ Christiansen, J. (1982). "Cancerforskning i Danmark." *Ugeskrift for Læger* **144**: 815-816, p. 815.

manager or researcher had much experience in dealing with the structural challenges at hand. The organisation of a biomedical field posed the special problem of coordinating the research and administration at state-funded universities (with democratic structures/autonomy of science) and the country's state/municipal/county-owned hospitals (traditional physician hierarchy/activities centred on the patients) along with the research done at several privately operated research institutes. How was this to be done?

The members of the NSRC subcommittee considered the US to be one of the first nations to have given this matter any serious thought. The subcommittee members had had a hard time getting hold of any material on how other countries had organised their cancer field, but the American cancer researchers and science managers seemed to be the ones who had published most on the subject because of the National Cancer Act of 1971. Nevertheless, the subcommittee members had only managed to find a copy of the *NCI Fact Book (1979)* which informed them on the activities and structure of the National Cancer Program³²⁹. There are no indications in the Kjeldgaard Report that the subcommittee had got hold of any material on the preceding discussions of the difficult implementation of the Cancer Act. At least it is not listed where the Report presents and discusses the international literature available³³⁰. This is surprising because many of the recommendations of the Kjeldgaard Report seem to be adopted directly from this Act, or at least from the way American cancer research was organised in 1979 – e.g. with regard to the section on the establishment of new and so-called “*comprehensive cancer research centres*”³³¹. For this reason, it is worth while taking a closer look at the US history behind the organisational instrument which the NSRC subcommittee adopted as its third recommendation to the Danish government: the establishment of Danish comprehensive cancer centres.

3.6 The concept of “comprehensiveness”: inspiration from the US

In addition to the public National Cancer Institute (NCI), the United States lent room to several large and wide-ranging *private* cancer research and treatment centres such as the Roswell Park Cancer Institute, the MD Anderson Cancer Center, and the Memorial Sloan-Kettering Cancer Center which had inspired Engelbreth-Holm's dream of a similar Danish institute in the 1940s.

³²⁹ This does not mean that no material was available on discussions of the organisation of cancer research in other countries, but for some reason the subcommittee did not get a hold of it. Some of the material available at the time will be presented in paragraph 3.6.

³³⁰ Forskningsråd, U. f. b. c. n. a. S. n. (1981). *Cancerforskning i Danmark*, SNF., p. 81.

³³¹ For the full text version of the National Cancer Act of 1971, see, Kennedy, E., H. Wilson, et al. (1972). "National Cancer Act of 1971." *Cancer* 29(4): 917-921.

The Cancer Centre That Never Was

These exemplary enterprises tried to bridge the gap between bench and bedside by placing basic and clinical cancer research under the same roof. As mentioned in chapter 2, the idea of organising cancer services and research in so-called multidisciplinary institutes or “centres” became popular after World War II and took on new strength as the National Cancer Institute began to provide support for already established and freestanding cancer centres from the beginning of the 1960s, in the hope that a series of autonomous but collaborating and geographically equitably distributed centres would provide cancer patients with the best care – based on the latest research – no matter where they lived³³². When President Nixon signed the National Cancer Act of 1971, confidence in the organisational values of the cancer centre took on new strength as the Act directly instructed the NCI to establish an additional 15 centres.³³³

But in spite of the federal efforts to use the privately owned and successful cancer centres as models for a new national coordination of the cancer research enterprise, not everyone agreed that this was the right way to go about it. Already during the preparation for the Cancer Act in 1971, the American virologist Seymour S. Cohen argued that the “blind” establishment of several autonomous cancer centres had not been the right tool for the job of organising the anti-cancer effort³³⁴. Much like the situation in Denmark, American cancer research of the early 1970s was a fragmented discipline that was not given much interest in terms of Lundgren’s “outer institutionalisation”³³⁵ by the administration of most medical schools and universities, and according to Cohen, these research institutes were therefore not suitable instruments for the development of cancer research. But unfortunately, he felt that the situation was not markedly better at the categorical³³⁶ cancer institutes (or “centres”, as they became known in this decade)³³⁷:

There are numerous private and governmental institutes whose ostensible aims are to perform research on cancer. Coming into existence or expanding largely after World War II, when much less was known about cancer, virology, or cell biology, the institutes rarely had systematic programs. They stressed that since cancer was a largely unknown entity, any research on growth would help to clarify the cancer problem. This position was emphasized to attract scientists mostly interested in biological problems other than that of

³³² Roberson, W. M. Ibid.: "Current National Cancer Institute Center Programs." 887-888, p. 888.

³³³ Kennedy, E., H. Wilson, et al. Ibid.: "National Cancer Act of 1971." 917-921, p. 3.

³³⁴ Cohen, S. s. (1971). "Cancer Research and the Scientific Community." *Science* **172**: 1212-1214.

³³⁵ Again, this term refers to the emergence of scientific disciplines and is not related to Douglass C. North’s concept of “institutions”.

³³⁶ Categorical cancer centres are here defined as research units ideally dedicated specifically to study cancer problems, as opposed to the medical schools at which cancer research, according to Cohen, was reduced to sub-areas of established disciplines.

³³⁷ Cohen, S. s. (1971). "Cancer Research and the Scientific Community." *Science* **172**: 1212-1214, p. 1213.

The Cancer Centre That Never Was

cancer and to facilitate obtaining financial support for these workers. As a result, cancer institutes now contain many investigators who are only secondarily interested in cancer. The institutes have frequently obtained associations with universities and have used similar tenure regulations, which now handicap reorganization of these institutes. It is clear that, even as in the universities, research in these institutes is fragmented and lacks a serious program and direction”³³⁸

The very concepts of both cancer research *and* the cancer institute – the cancer centre – had to be clearly defined. Much like the umbrella like terms “cancer” and “cancer research”, the definition of the cancer centre was blurred to say the least, as it was used to designate an array of very disparate research institutes. There seemed to be a pressing need to define exactly what a cancer centre ought to be and to find out if and why it was thought to be the right organisational mode in the war against cancer. Cohen must have doubted the virtues of the “cancer centres”, the idea of which had been persistent in the US attempts to rationalise the organisation of its cancer treatment services. This despite the fact that the early 20th century was marked by a great deal of disagreement between professional groups on whether the centre was the right tool for the job, or if the cancer treatment planned to be offered at the centre could just as easily be delivered through existing hospitals or through a combination of central units with satellite clinics in order to reach the most patients³³⁹. And even though support for cancer research and chemotherapeutic trials increased tremendously in the mid-20th century – and it became popular to move these activities under the same roof as the cancer treatment units to form larger “cancer centres” – Cohen did not necessarily think that this solution had proven itself:

In sum there is no organization on the national or international scene which can easily facilitate the solution of the numerous large and identifiable problems in cellular and virus biology, drug design, and clinical pharmacology as a rational exercise in scientific collaboration.³⁴⁰

Cohen was far from the only one pondering the effects of the cancer centre as an instrument for scientific collaboration and progress in the war on cancer. On December 9 and 10 of 1971, only two days after the signing of the National Cancer Act, a conference on the topic “Planning for cancer centres” was held in Washington. It was initiated by a small committee that had run into problems planning for a cancer centre at Washington University School of Medicine and wanted to discuss these problems with anyone who had already built a cancer centre or was planning to

³³⁸ Ibid., p. 1213-1214.

³³⁹ Cantor, D. (2007). "Introduction: Cancer Control and Prevention in the Twentieth Century." Bulletin of the History of Medicine **81**: 1-38, p. 7.

³⁴⁰ Cohen, S. s. (1971). "Cancer Research and the Scientific Community." Science **172**: 1212-1214, p. 1214.

The Cancer Centre That Never Was

do so³⁴¹. The conference received backing from the NCI and the private American Cancer Society (ACS), and it sought to provide answers to important questions that surprisingly had not been directly addressed before: Just what exactly is a cancer centre? Why have a cancer centre? How do you develop and operate a cancer centre? And do cancer centres really improve cancer research, provide better medical care for the cancer patient, and provide better teaching about cancer?³⁴²

The conference showed that there is no final answers to these questions, or at least that the concept of a cancer centre was constantly evolving and had to be re-defined over and over again throughout history because the knowledge of cancers and thus the nature of the heterogeneous cancer research and treatment was changing and continuously required new organisational settings to accommodate these changes (with regard to technical equipment, geographical location, the distance between bed and bench side etc.). The name of these cancer fighting entities had been used to represent a bewildering array of organisations and had evolved accordingly from “cancer institutes” to “cancer centres” and eventually to the so-called “comprehensive cancer centres”. This term was coined by the NCI in order to satisfy the language of the National Cancer Act of 1971, which demanded a group of cancer centres with precise organisational structures and a broad approach to the cancer problem (including research, clinical care, epidemiology, and community outreach).³⁴³

According to American radiation oncologist Jerome M. Vaeth and Australian radiobiologist Peter Ilbery, who have both written about the concept of cancer centres, the organisational forerunners of the comprehensive cancer centre were believed to be the strongly centralised Scandinavian radiation therapy centres³⁴⁴. The traditional cancer centre concept which sprang from these roots was “a large geographical building or buildings, usually in a large city, inhabited by cancer patients, specialists, research workers and students, and engaged in care as well as research and training”³⁴⁵. This particular definition is very similar to the centre proposed by Danish cancer researcher Dr. Engelbreth-Holm in the 1940s. Engelbreth-Holm mentioned the

³⁴¹ Scott, W. G. (1971). "Introduction to the conference on planning for Cancer centers." *Cancer* **29**(4): 819-820, p. 819.

³⁴² Ibid., p. 820.

³⁴³ Shingleton, W. W. (1989). "Cancer Centers- Origins and Purpose." *Archives of Surgery* **124**: 43-45, p. 44.

³⁴⁴ Vaeth, J. M. (1975). "The network concept in the cancer center." *The American Journal of Roentgenology Radium Therapy and Nuclear Medicine* **123**(1): 3-6, p. 4.

Ilbery, P. (1978). "The Comprehensive Cancer Centre." *The Medical Journal of Australia*(1): 573-576, p. 573.

³⁴⁵ Vaeth, J. M. (1975). "The network concept in the cancer center." *The American Journal of Roentgenology Radium Therapy and Nuclear Medicine* **123**(1): 3-6, p. 4.

The Cancer Centre That Never Was

American cancer institutes as the sole source of inspiration for his proposed model. Even though he himself was working at a cancer lab at a radium therapy station, he clearly did not think it constituted the kind of traditional Scandinavian centre referred to by Vaeth and Ilbery in the above. So whether or not the American cancer researchers and therapists had at some point in history found inspiration in the Scandinavian radiation centres, it was the American take on “the cancer centre” that resonated well with Engelbreth-Holm in the 1940s and later on with the authors of the Kjeldgaard Report.

No matter the origin, the abovementioned traditional concept of the cancer centre was further elaborated with the NCI centre program of 1971, which introduced the latest organisational weapon in the war on cancer in the form of a series of autonomous but collaborating *comprehensive* cancer centres which seemed to be “better” than non-comprehensive ones. Apparently, a cancer centre was not a clear-cut definition which pointed to one type of research institute; on the contrary, it referred to a myriad of research and treatment facilities all over the world. In 1976, the *International Union against Cancer (UICC)* found that 81 countries³⁴⁶ had cancer centres, and that these could be roughly categorised in the following fashion:

³⁴⁶ Denmark was among the 81 countries in the UICC-survey from 1976. The UICC had set up four categories of cancer establishments, and the Danish Cancer Research Institute in Aarhus and the Fibiger Institute were characterised as typical “cancer research institutes”, inasmuch as they both housed clinical and experimental cancer research (see, UICC (1976). *International Directory of Specialized Cancer Research and Treatment Establishments. UICC Technical Report Series vol. 23*. Geneva, UICC.), p. 78-80). The Fibiger Institute even provided professional education for cancer-research workers, but none of the two private institutes offered treatment of cancer patients and could thus not be called “comprehensive”. The UICC categorised the radium stations in Aarhus and Odense as “hospital units”, and it distinguished the Finsen Institute as a “comprehensive cancer centre”, because the Institute’s field of activity included experimental and clinical cancer research as well as cancer treatment and rehabilitation, cancer control, and professional education. The UICC survey claimed that the Institute had about 125 full-time cancer researchers with either medical or scientific training on the payroll along with 843 lab technicians, nurses, and administrative staff. Nevertheless, neither the authors of the Kjeldgaard Report – including Nis I. Nissen of the Finsen Institute – nor the rest of the Danish cancer community seemed to be aware of the “comprehensiveness” of the Finsen Institute. Perhaps they had not read the UICC survey, or perhaps they did not agree with its conclusions. After all, the Finsen Institute was not a cancer institute devoted to the study and treatment of cancer alone – in other words – it was not a *categorical* cancer institute. In fact, only the Institute’s Finsen Laboratory could live up to this definition, so the data from the Finsen Institute must have been misinterpreted by the international UICC. The Finsen Institute consisted of several treatment and research clinics, and the Finsen Laboratory was only one of them; and as the Kjeldgaard Report had stated that there were only 114 active cancer researchers in the country, there could not possibly be 125 full time researchers working at the Finsen Institute with cancer as their main objective, even though the UICC seemed to be under the mistaken impression of it. As a result, the union believed the cancer centre to be much larger, than it actually was. Or perhaps the Danish cancer researchers simply could not easily fit the Finsen Institute into the same category as the large and famous American comprehensive cancer centres such as the Roswell Park Cancer Institute, the MD Anderson Cancer Center, and the Memorial Sloan-Kettering Cancer Center that had inspired professor Engelbreth-Holm many years earlier. However, the question of whether or not the Danish researchers were acquainted with the UICC definitions is irrelevant. They wanted something which the Finsen centre could not provide, comprehensive or not. The cancer researchers wanted to

The Cancer Centre That Never Was

- Hospitals or other medial establishments having a *SEPARATE* identifiable organisational department devoted to, and specialised in the diagnosis and comprehensive multi-disciplinary treatment of all cancer patients or of a given site or sites. It is expected that such a department or unit would have a director to co-ordinate cancer treatment in the hospital, and would also be engaged in clinical research.
- University departments or biomedical research centres which are engaged in a structured program of cancer research.
- Cancer research institutes – which may be defined as physically or organisationally essentially autonomous entities devoted entirely or almost entirely to a wide spectrum of basic and clinical cancer research. Such institutes will have a staff of research workers (medically and/or scientifically qualified) and technicians, and a wide range of equipment, usually with facilities for the training of cancer-research-workers.
- Comprehensive cancer centres - which may be defined as physically or organisationally autonomous entities devoted to the diagnosis and multi-disciplinary treatment of cancer patients, to basic and clinical cancer research, and to the training of personnel in cancer diagnosis, treatment and research. In addition, they will probably have facilities for some or all of the following: a cancer registry, rehabilitation, a social-welfare service, convalescent and intermediate care, home-care support, patient follow-up, and public education.³⁴⁷

The NCI cancer centre program and the ACS put their faith in the latter type of research facility as the tool that could coordinate the broadest attack on cancer by strengthening cooperation between basic, epidemiological and clinical cancer research, by offering the most modern cancer treatment for patients, by offering cancer training, and by providing community outreach services³⁴⁸. In the opinion of the NCI and the ACS, the comprehensive cancer centre was considered to be “one of the most important features in the new era of the fight against cancer”³⁴⁹. To make sure that other types of cancer institutes were not confused with these ideal

coordinate Danish cancer research in fitting organisational frames at a fitting location, and as will be evident in the following, the clinical units of the Finsen Institute were not considered good enough.

³⁴⁷ Ibid., p. III.

³⁴⁸ Shingleton, W. W. (1989). "Cancer Centers- Origins and Purpose." *Archives of Surgery* **124**: 43-45, p. 44.

Edwards, M. H. (1972). "Role of the Cancer Center in Training." *Cancer* **29**(4): 889-891, p. 889.

³⁴⁹ Adams, L. W. (1972). "Cancer Centers and the American People." *Cancer* **29**: 821-823, p. 823.

The Cancer Centre That Never Was

centres, the NCI issued a set of requirements for any centre that aspired to bear the mark of “comprehensiveness”³⁵⁰. These criteria have been condensed to the following³⁵¹:

- a) A comprehensive cancer centre should be a geographic unit/entity.
- b) It should be affiliated with a university or a medical school, to facilitate recruitment of first class staff.
- c) It should have a clear vision and a set of goals, plainly and prominently stated.
- d) It should be multidisciplinary (incl. basic, clinical and epidemiological research departments).
- e) It must possess a high quality research program in basic, clinical, epidemiological, and evaluative research which exists in an environment conducive to a collaborative effort. It should promote interdisciplinary collaborations through a program objective (but not at the cost of academic freedom).
- f) It should have an effective process for inter-professional criticism (peer-review).
- g) It should be led by a director in absolute charge of budget, space, research program, and appointment of staff.
- h) It should be organised to combine patient care (hospital/clinic), research (labs, continuous purchase of the best equipment), and education (libraries, communication media, conference- and classrooms). It must give equal attention to all three of these areas of cancer work.
- i) It must inform and advise the public on cancer³⁵².

In contrast to the traditional concept of the cancer centre as a building in which the different aspects of cancer work were simply placed under the same roof in the hope of fluke collaborations, the criteria can be seen as an early attempt to organise a cross-disciplinary attack on cancer by focusing on science management rather than just on the spatial structure of the centre³⁵³.

³⁵⁰ NIH (1974). The Cancer Centers Program: The National Cancer Institute. Washington, US Department of Health, Education and Welfare
Public Health Service
National Institutes of Health., p. 9.

Patrice Pinell describes similar definition problems and attempts to distinguish “official” cancer *treatment* centres from “unofficial” ones in France in the 1920s, see: Pinell, P. (1991). "Cancer Policy and the Health System in France: "Big Medicine" Challenges the Conception and Organization of Medical Practice." Social History of Science **4**(1): 75-101, p. 80-81.

³⁵¹ Shingleton, W. W. (1989). "Cancer Centers- Origins and Purpose." Archives of Surgery **124**: 43-45, p. 45.

³⁵² Clark, R. L. (1972). "Administrative and Fiscal Aspect." Cancer **29**: 846-851, p. 848-849.

Clark, R. L. (1977). "Comprehensive Cancer Centers." Comprehensive Therapy **3**: 9-14, p. 12.

Simone, J. V. (2002). "Understanding Cancer Centers." Journal of Clinical Oncology **20**(23): 4503-4507, p. 4504.

³⁵³ This emphasis on actively creating the right milieu and administrative frames for scientific collaborations and synergy is echoed in recent definitions of a cancer centre:

The Cancer Centre That Never Was

Following this shift of focus in the definition of a cancer centre in the 1970s and onwards, the process of *planning* a centre was changed too. The Washington conference in 1971 reflected that it was time to abandon the traditional idea of finding a suitable architectural unit or facility before giving any thought to the cancer centre as an *organisational* unit with accurately planned research programs and management.³⁵⁴ According to the proponents of the new approach, anyone planning to establish a cancer centre would do better if they set out to formulate the specific research/clinical program and objectives of the cancer centre as the very first step of the planning process³⁵⁵. This could be done only by delineating elements (such as surgery, microbiology etc.) and identifying potential groups who needed to be in the centre. The technical, spatial, or co-operational requirements of these scientific and/or medical activities would help shape the structure and nature of the centre.

The next step would ideally be to appoint a director of the centre and assign all responsibility for further planning to him and, perhaps, a small planning committee. Only at this point could the formal planning efforts begin for such matters as finance, housing and everyday administration. It is worth noticing, though, that the proponents of this view did not then – or since – establish precisely which internal organisational and fiscal arrangements could function in a cancer centre. Nor did they find a conclusive answer to the question of whether or not it was feasible and desirable to have different types of public and private organisations³⁵⁶ cooperate to form a centre, or if the centre was more likely to come into existence and function if only one organisation (such as the State) was in charge financially and managerially³⁵⁷.

Back in Denmark, the American discussions of this question would have been of immense importance to the NSRC subcommittee who readily adopted the idea of the comprehensive cancer centre as the primary tool to coordinate Danish cancer research and to bridge the gap between bench and bedside, although the organisational structures and the part played by the

"A cancer center is a formal organization of diverse and complementary specialists who work on the cancer problem together and simultaneously rather than serially. The center is under sufficient central authority to focus efforts and organize resources for the efficient and synergistic accomplishment of its goals in patient care and/or research. The center enables and catalyzes a high level of cancer-focused achievement that would not happen without such formal organization of staff and programs. Leadership in forging progress in the understanding and management of cancer distinguishes a cancer center." (Dr. Joseph V. Simone, Huntsman Cancer Institute, US (2002)), see: Simone, J. V. (2002). "Understanding Cancer Centers." *Journal of Clinical Oncology* **20**(23): 4503-4507, p. 4503.

³⁵⁴ Walter, W. A. (1972). "Planning for Cancer Centers." *Cancer* **29**(4): 891-893, p. 892.

³⁵⁵ Ibid.

Durant, J. R. (1972). "Planning for Cancer Centers - Workshop III Summary." *Cancer* **29**: 909-913, p. 911.

³⁵⁶ Hospitals, private charities, university research labs etc.

³⁵⁷ Orbison, J. L. (1972). "Review of Proposals." *Cancer* **29**(4): 916.

The Cancer Centre That Never Was

public and the private sectors in Denmark were markedly different from those of the United States. When the Report was written there were no public cancer research centres, and the Report thus recommended that a series of publicly-owned comprehensive cancer centres should be established in connection with the hospital oncology departments and the universities of the largest cities in the country.

The recommendation was essentially the same as Dr. Engelbreth-Holm's in the 1940s with the exception that the Report supported the establishment of a series of centres instead of just one in Copenhagen. Of course, back in the 1940s, the country only had one fully established medical faculty and most of country's cancer research was done in Copenhagen, and it would have made no sense to propose more than one single national centre. Still, the content of the recommendation was basically the same as in the 1940s: bridging the gap between bench and bedside by making clinical and scientific specialities and disciplines work together under the same roof and with the same chief objective. At the time when the Kjeldgaard Report was published, this would require the moving of several separate research groups into the same geographical unit to mimic the traditional organisational structure at the universities³⁵⁸.

The Report anticipated that this would be the case in Copenhagen, which in addition to lending room to the excellent hospital *Rigshospitalet* and *Copenhagen University* also lent room to the *Danish Cancer Registry*, *The Fibiger Institute* and to *The Carlsberg Biology Institute*, which since the death of Professor Fischer had functioned as an institute for cell biology but now planned to specialise in cancer research³⁵⁹. For this reason, the Kjeldgaard Report suggested that one of the proposed new State-financed comprehensive cancer centres should incorporate this private institute in the enterprise and that:

(...) it would be natural to consider also including the cancer research institutes of the Danish Cancer Society in the plans for the state cancer centres, as part of the Society's endeavours to realise a governmental take-over of the institutes which the Society has established with great foresight. Meanwhile, in cases where a constructional frame cannot be established, a cancer research institute will be regarded as a scientific and research financial unit in which scientists and research groups at different already existing institutes are joined in to a single research unit with a shared research management. General appropriations for cancer research from universities or foundations can be channelled through this organisational structure. No matter what, it is imperative that such cancer research institutes have a certain size and mode of organisation that will ensure a great degree of flexibility so that the necessary lab, equipment, and staff facilities can be reallocated at any time to the most active research groups and thereby provide the

³⁵⁸ Forskningsråd, U. f. b. c. n. a. S. n. (1981). *Cancerforskning i Danmark*, SNF., p. 92.

³⁵⁹ *Ibid.*, p. 93.

The Cancer Centre That Never Was

practical foundation for an optimal use of appropriations from the proposed state cancer research fund.³⁶⁰

The NSRC subcommittee appears not to have read much material on the subject or discussed the international experiences, and it therefore could only have had a very vague idea of whether or not a comprehensive cancer centre would be a fruitful organisational mode for Danish cancer research. Because even though the UICC and the NCI had chosen the comprehensive cancer centre as their weapon of choice in the war against cancer, they were not necessarily right³⁶¹. Or perhaps the Committee used the “comprehensive cancer centre” as a tool to bring about the institutional changes seen in other countries just to secure better funding for cancer research, no matter if they believed in the centre or not. On the other hand, such cynical (mis)use of documentation of international programs would be a short term solution, as a potential change of formal institutions would require maintenance through e.g. positive feedback and increasing returns in the form of scientific and medical breakthroughs, the realisation of the promised socio-economic benefits etc. The centres needed to perform and deliver!

The Kjeldgaard Report’s survey was a chance to ask a number of critical questions. For to what degree was it feasible or even desirable to coordinate the heterogenic field of Danish “cancer research”? Did it make sense to place a good deal of the research groups under the same roof in a centre, or would certain parts of the cancer research field not collaborate with each other as their work was so far apart that it would not at all make sense to collaborate? The term “cancer research” referred to a myriad of different research activities of which far from all would benefit from being placed beside each other (e.g. cancer virology projects and projects into the relation between diet and cancers).

³⁶⁰ Ibid.

³⁶¹ In his book “The Dread Disease” (1987), James T. Patterson describes the growing public resentment towards the American Cancer Program and the “Cancer Establishment” (The NCI, the ACS, and the large comprehensive cancer centres) that received a tremendous level of funding but did not deliver what the public perceived as sufficient breakthroughs in the war on cancer in the 1970s and 1980s. In other words, the program did not deliver the increasing returns of positive feedback needed to legitimize continuing the program in the same manner (by building centres) – going further down the same path so to speak. Also cancer authorities such as Michael Shimkin, who was otherwise supportive of research, were unsatisfied with the way the program was designed and executed. Objecting in particular to the “profusion of centres, comprehensive, specialized, and what-have-you”, he would rather that the program had made long term investments in “smaller laboratories and leave them alone to reach for the brass ring”. (Patterson, J. T. (1987). The Dread Disease: Cancer and Modern American Culture. Cambridge, Harvard University Press, p. 268). For obvious reasons, the Danish NSRC subcommittee could not have been aware of this work in 1979-1981 when they prepared the Kjeldgaard Report, but the criticism voiced here was also heard in the late 1970s, and the subcommittee was either unaware of this 1970s debate on the efficiency of the American cancer centres, or perhaps the committee members ignored it before the publication of the Kjeldgaard Report and during the subsequent preparations for the Rockefeller-centre, the idea for which derived from the Kjeldgaard Report and which will be discussed in chapter 4.

But this was not dealt with in the Report, whether it was due to a deliberate omission or to blind belief in the success of the American cancer centres based on the scarce material that was at the authors' disposal. At least the NSRC subcommittee could not have found *unambiguous* proof of the universal positive effects of the comprehensive cancer centre in the NCI fact-book of 1979, which seems to be the only published material on the matter which was available for the subcommittee at the time. But the critical questions were not asked in the Report, and this point was noticed when the Kjeldgaard Report was finally published in 1982.

3.7 Reactions to the Kjeldgaard Report

Following the date of publication, Kjeldgaard and the chairman of the Danish Cancer Society promoted the Report's findings and recommendation in newspapers and journals³⁶². They argued that the politicians were obliged to support cancer research from a socio-economic point of view. They claimed that cancer was the cause of up to 25 % of all deaths in the country, and that the combined number of Danish cancer patients were hospitalised a total of 850,000 days per year and that the cost of treating these patients amounted to DKK 1.500 million/year³⁶³. In comparison, the State³⁶⁴ allegedly spent only about DKK 30 million/year on cancer research that could potentially deliver the cure against the dreaded disease (e.g. the promising discovery of oncogenes). The man who lent his name to the Report – Kjeldgaard – thus argued that it could not be difficult to see that in this case it paid the most to research. It was a science-push-man now using the benefits of applicable/strategic research as selling points.

Economic arguments of this calibre usually appealed more to politicians than did statements about the virtue of science for the sake of science itself, as they played into the institutional matrix and political agenda of trying to decrease the ever rising operating costs of treatment at the hospitals. As mentioned above, many politicians would jump at the chance to express their sympathy and support for a research-based war on cancer, although they could not allocate “new” discretionary funds for the cause and would probably have to resort to redistributing the already scarce existing means at the cost of other research areas, as the two chairmen of the

³⁶² See, Kjeldgaard, N. O. (1982) "Hvad skal der ske med kræftforskningen i Danmark?" Jyllands-Posten 02.03.1982, Kjeldgaard, N. O. (1982). "Kræftforskning er for spredt og bør styrkes i offentligt regi." Forskningen og Samfundet 8(2): 6-7, Kjeldgaard, N. O. (1982) "Er det kun de gamle der får kræft?" Jyllands Posten København 16.03.1982, Olsen, S. (1982). "Dansk kræftforskning: Monopol eller samarbejde?" Forskningen og Samfundet 8(3), Olsen, S. (1982) "Er indsatsen i kræftforskningen tilstrækkelig?" Politiken København 15.02.1982, Olsen, S. (1982). Kommentar. Private papers of Jes Forchhammer..

³⁶³ Kjeldgaard, N. O. (1982) "Hvad skal der ske med kræftforskningen i Danmark?" Jyllands-Posten 02.03.1982, p. 9, Forskningsråd, U. f. b. c. n. a. S. n. (1981). Cancerforskning i Danmark, SNF., p. 97-98.

³⁶⁴ Throughout the material of this thesis, cancer researchers refer to the “State” in newspapers and meeting minutes without always specifying which ministry, research organ, or agency they are talking about.

The Cancer Centre That Never Was

NSRC and the MRC had feared. And as is also mentioned above, the chairmen agreed that the Report's recommendations were commendable, but feared that the authors of the Report did not have realistic expectations of the State's involvement in the financial support of cancer research, and this was supported by a cancer researcher who has since claimed that he did not at the time believe that the Report operated within the confinements of the "art of the feasible"³⁶⁵.

This probably referred to the new formal institutions needed to carry through the recommendations: extensive changes in the way Danish ministries conducted research policy and initiated strategic research programs. It has only been possible to find a few reactions to the Report from people outside the cancer community, and most of this criticism tended to be diffuse worries not specifically aimed at the findings of the Report³⁶⁶. However, a statistician from the Department for Mathematical Statistics at Copenhagen University, Inge Henningsen, aimed her criticism directly at the Report's findings and recommendations. Although her criticism was published in a minor left wing journal that was not necessarily read by the authors of the Report, her concerns were important as she called attention to the fact that the statistical data in the Kjeldgaard Report did not support its recommendations!³⁶⁷ In particular, Henningsen wondered why the Report argued that cancer research at the Danish universities would be improved by the establishment of comprehensive cancer centres dedicated entirely to the study and treatment of cancer, when the Report otherwise clearly stated that the best research with the most international impact was in fact done at the universities and *not* at the entirely cancer-focused research centres of the private Danish Cancer Society (see figure 3-2).³⁶⁸ In other words, there was no statistical basis in the cancer survey for the recommendation of the comprehensive cancer centre:

³⁶⁵ Interview with Jørgen Rygaard 22.02.2005.

Patrice Pinell's work on the organisation of interwar French cancer services, describes how the French public authorities created a program for the establishment of a network of treatment centres and how the program was –at least on paper – fashioned as a harmonious adjustment between what must be done, what is financially and technically possible, and what is permitted by various constraints (Pinell (1991), p. 77). However, it did not take long before the harmony proved to be unobtainable in practice, and it seems that many Danish researchers feared that the Kjeldgaard Report did not balance such concerns either.

³⁶⁶ In Kjeldgaard, N. O. (1982) "Er det kun de gamle der får kræft?" *Jyllands Posten* København 16.03.1982, p. 8, Kjeldgaard quotes two doctors for having doubted the socio-economic benefit of supporting cancer research, and in Lindboe, O. (1982). "Kræft-forskning under revision." *Forskningen og Samfundet* 8: 24, p. 24., the editor of State Research Secretariat's journal uses the Report to undermine the Danish Cancer Society. However, none of this criticism was taken seriously by Kjeldgaard or Olsen, see: Kjeldgaard, N. O. (1982) "Er det kun de gamle der får kræft?" *Jyllands Posten* København 16.03.1982, p. 8, Kjeldgaard, N. O. (1982) "Hvad skal der ske med kræftforskningen i Danmark?" *Jyllands-Posten* 02.03.1982, p. 9. and Note from Steen Olsen handed out to the members of the Scientific Council of the Danish Cancer Society, (1982), *Personal Papers of Jes Forchhammer*, (Bagsværd), p. 2.

³⁶⁷ Henningsen, I. (1982). "Flere spørgsmål end svar." *Naturkampen*: 20-23, p. 23.

³⁶⁸ Ibid.

The Cancer Centre That Never Was

As mentioned before, there is no documentation in the Report to support the fact that the proposed changes would benefit Danish cancer research. The suggestions must thus be based on the subcommittee's subjective estimation of how cancer research ought to be organised, or, on the purely tactical consideration that it is all about adjusting to the taste of the authorities when you need money from them.³⁶⁹

Indeed, the questionnaires sent out by the NSRC subcommittee had asked the cancer researchers to make their own suggestions as to how to improve Danish cancer research, and the final recommendations of the final Report seem to be more in accord with these suggestions than with the Report's own statistical data. The cancer researchers did indeed propose the establishment of state-financed comprehensive cancer centres, but it has not been possible to find the grounds for them doing so. It is possible that some of them may have worked in – or were inspired by – American comprehensive cancer centres but no documents have supported this idea.

In a Bourdieuan perspective, the cancer researchers were all entrepreneurs in the cancer field, and as such it is likely that they promoted the idea to better their standing (new facilities, funding, professional status and so forth) regardless of the lack of proof of concept. Furthermore, Henningsen's criticism of the Report's discrepancy between its recommendations and statistical material indicates an occurrence of path dependence. The apparently uncritical adoption of the American cancer program's emphasis on comprehensive cancer centres goes against the Report's findings. In a path dependence perspective, the Report thus goes against a more productive path with increasing returns. The Report had shown that research done at institutes not dedicated entirely to the study of cancer delivered cancer research with the most international impact, and on this basis it would not make sense to build specialised centres. However, the Report suggested that this be done, and it thus re-actualised the path created by Hartvig Frisch in the late 1940s whilst ignoring the alternatives, even though this path had never produced increasing returns in the form of a productive and public-private comprehensive cancer centre. There had been no increasing returns which classical economic theory otherwise claims to be necessary to continue down a chosen path. Something else (and informal) in the institutional matrix must have influenced the choice. The researchers' subjective tastes and preferences seemed to have played a bigger role than statistics in the Kjeldgaard Report's recommendations to the State. In this case, informal institutions such as the personal taste and preferences of the researchers themselves were used to re-actualise and perpetuate the formal

³⁶⁹ Ibid.

The Cancer Centre That Never Was

institutions from the 1940s in order to make the establishment of a state-financed comprehensive cancer centre possible.

As for the Report's recommendation to establish a State cancer research fund with a general staff of distinguished scientists, this organ was very similar to the American foundation that helped eliminate poliomyelitis in the US, although not all of the scientific problems connected with the disease were solved.³⁷⁰ Henningsen characterised the recommended changes as an unmotivated Americanisation of the much smaller Danish research system. The Kjeldgaard Report had shown that only 15 % of the 114 active cancer researchers in Denmark displayed a high publication intensity, and that future Danish cancer research was to be based on this small group of 15-20 brilliant researchers. Henningsen wondered if this was enough for a broad national cancer program, although she assumed that each of these few researchers would get to lead their own groups consisting of less brilliant "craftsmen-scientists"³⁷¹.

The proposed system is a relatively slavish transfer of the American funding system. I do not know whether the American cancer research compared to its effort generates better results than the Danish? But even if it did, one could question whether or not this system could be easily transplanted to Denmark, where traditions are completely different and where it will be implemented at a completely different scale. The suggestions represent what one could call the Los Alamos syndrome: The research manager's dream of being able to say to the local Oppenheimer: "Here are unlimited funds, get us the best staff members – and make us the nuclear bomb!" without considering that when you offer DKK 50,000 and ½ lab assistant, you will not even make one ten thousandth of a bomb before someone else will be all done with it. If Danish research is to do anything rational, it must not be a competition with the large nations in miniature format or at snail pace. When and if the Danish research milieu makes its mark, it will rather be because of its peculiarities; the way it is arranged in niches.³⁷²

Henningsen makes some valid points. The recommendation of a state-financed and strategic cancer fund severely challenges the existing institutional matrix. As mentioned above, the establishment of the fund would require a restructuring of the use of ministerial resources, a new cross-ministerial collaboration on the complex issue of research policy and the initiation of strategic programs, and the transfer of ministerial control over the use of strategic research funds to the administration of the cancer fund and a comprehensive centre. An administration that would be able to define the direction and content of the strategic program. If there were no compelling (statistical) evidence that such an arrangement would in fact yield better result than

³⁷⁰ For more on this see Cohen, S. s. (1971). "Cancer Research and the Scientific Community." *Science* **172**: 1212-1214, p. 1214.

³⁷¹ Henningsen, I. (1982). "Flere spørgsmål end svar." *Naturkampen*: 20-23, p. 22.

The report did not either reflect thoroughly on the concept of *critical mass* in a program or a cancer centre.

³⁷² Ibid., p. 23.

status quo in the cancer community, why would and should the State set up such a strategic program? And without this initiative and change of formal institutions, the proposed cancer centres and the rest of the Report's recommendations would only come about – if at all – in an amputated version within the existing institutional matrix. The outlook was bleak for the vision presented in the Report's recommendations.³⁷³

3.8 The Danish Cancer Society and the Kjeldgaard Report

Although the reactions to the Kjeldgaard Report from outside the cancer community were few in number – and nothing followed from the few actually expressed – the Report was discussed vividly in the private Danish Cancer Society which as a private charity depended on a good public image. The Society had not criticised the Kjeldgaard Report's findings even though the Report had indicated that the research activity and quality of the organisation's own research institutes had not been good. Of course, two members of the Society's Head Board had been among the authors of the Report, and the Society's chairman, Steen Olsen, thus only half-heartedly defended his much criticised research institutes by noting that the main objective of both the public and the private sectors was to maximise the effort against cancer, and that it would be unprofitable to measure one against the other "as Hogarth's hard-working and lazy apprentice"³⁷⁴.

The researchers at the Society's Fibiger Institute and the Aarhus Cancer Research Institute vividly claimed to have proof that the statistical data of the Report were faulty and unjust to them and therefore pressed the Scientific Council and the administration to discredit the Report, but the Society's management never publicly criticised the Report³⁷⁵. The researchers, however, were given the opportunity to present their own data at one of the Society's strategy meetings on March 5 1982. At this meeting, research director Jørgen Kieler and cancer researcher Kay Ulrich of the Fibiger Institute presented their own criticism of the Kjeldgaard Report's figures and conclusions. In addition, they wanted to know who had initiated the Report and why³⁷⁶.

³⁷³ It has not been possible to find any response to Henningsen's criticism from the authors of the Kjeldgaard Report.

³⁷⁴ Note from Steen Olsen given to the Scientific Council of the Danish Cancer Society, (1982), Personal Papers of Jes Forchhammer, (Bagsværd), p. 3.

³⁷⁵ DUV (1982). Mødereferat fra det Videnskabelige Udvalg 03.03.1982. Bagsværd, Personal Papers of Jes Forchhammer., p. 2.

³⁷⁶ Kieler & Ulrich (1982): *Svar på den kritik der er rejst af KB's eksperimentelle institutter i den af SNF udgivne rapport om cancer forskning samt i Professor Kjeldgaards oplæg til strategimødet den 5/3-1982.*, Archives of the Danish Cancer Society, (Copenhagen).

The Cancer Centre That Never Was

This request seems to indicate that the two cancer researchers were under the impression that the cancer survey was done with an ulterior motive besides that of improving Danish cancer research in general. They argued that the real objective was to discredit the research institutes of the Danish Cancer Society. Also, they wanted to know what had been the political intent behind the establishment of the NSRC subcommittee, and suggested that it might have been “to help financially distressed university laboratories by moving money from the institutes of the Cancer Society to the universities”.³⁷⁷ Kieler also pointed to the fact that the Fibiger Institute had been moved so many times that the research and publication rate of its staff had suffered. It was thus unfair to compare this nomadic unit to the universities. Nevertheless, the Danish Cancer Society brushed off the critique by agreeing with the conclusions of the Kjeldgaard Report, and it never publicly criticised the Report’s findings.

It seems that Kieler’s and Ulrich’s criticism was met with a deafening silence, and that this might have been the private Society’s way of “setting them straight” with the help of a report from the State’s research council. Kjeldgaard himself was appointed member of the Society’s *Executive Committee* in 1981, and even though this was one year prior to the publication of the Report, the Society was already aware of its findings, as it had several representatives on the NSRC subcommittee³⁷⁸. Kjeldgaard’s new capacity allowed him to draw on his experience from the cancer survey and make suggestions for changes in the management and organisation of the private society’s activities. He had not been able to do so as chairman of the NSRC subcommittee – which only had a mandate to recommend changes in the *public* sector – although the statistical material of the survey had clearly called for changes in the private cancer charity as well.

According to Kjeldgaard, his entry into the Danish Cancer Society was not coincidental³⁷⁹. Although he was the front figure of the Kjeldgaard Report, he had not been alone in taking the initiative for the survey. He had often discussed the matter of cancer research with his fellow NSRC members, and in particular his old friend and renowned biochemist university professor Hans Klenow and university professor in biophysics Ove Sten-Knudsen who both wanted to restructure the research field and were somewhat critical of some of the research done at the Society’s institutes. University professor Hans Klenow had worked at the Fibiger Institute in the 1960s, and the university biophysicist Sten-Knudsen had previously been a member of the

³⁷⁷ Ibid.

³⁷⁸ Kræftens-Bekæmpelse (1981). *Årsberetning 1981*. Copenhagen, Kræftens Bekæmpelse, p. 6.

³⁷⁹ Interview with Niels Ole Kjeldgaard 02.12.2004.

The Cancer Centre That Never Was

Society's Executive Committee and in this capacity he had then been chairman of a board discussing the research strategies of the Fibiger Institute, its relation to the Executive Committee, its relationship to the universities, and its leadership, and he had experienced some problems getting his points across to Kieler³⁸⁰.

Kjeldgaard and Sten-Knudsen therefore knew the private Society quite well, and Kjeldgaard has since argued that the Report partly came into existence in the hope of evaluating the research effort of the well-greased, but perhaps a bit old-fashioned private organisation³⁸¹. According to Kjeldgaard, he and Sten-Knudsen felt that Danish cancer research was dominated by "physicians who did not collaborate well", and that this was the reason why it had been so difficult to coordinate the research area³⁸². In his recollections, Professor Klenow indicates that there were internal power struggles at the Fibiger Institute in the 1960s, where he conducted cancer experiments with 2'-deoxyadenosine to study DNA synthesis in tumour cells. In 1963, Klenow was offered a chair in biochemistry at the Medical Faculty of the University of Copenhagen, and his considerations before taking the position paints a picture of the Danish Cancer Society:

Our working conditions were in many ways excellent and we had a minimum of administrative obligations. Also the financing of our work was no big problem. In addition, I could hardly see myself as one of these wise and influential professors with heavy responsibilities. On the other hand, there were within the Danish Cancer Society diverging viewpoints with regard to which direction cancer research ought to follow. I had found that it had been a problem that the direction I had chosen was not among the popular ones and that it probably would not be so in the future either. After many considerations and with reluctance I finally applied for the position.³⁸³

According to Jørgen Kieler, Klenow's research rightly belonged within the realms of academia and not at the private and entirely cancer-focused Fibiger Institute, as Klenow's work on DNA synthesis was not adequately focused on the cancer problem alone³⁸⁴. But as mentioned above, the introduction of the recombinant DNA technology and the discovery of oncogenes allowed the basic biological disciplines to find their way into clinically orientated cancer organisations worldwide – and even into the Fibiger Institute – in order to complement and support its

³⁸⁰ The topics of the boards discussions and the collaboration difficulties between Sten-Knudsen and Kieler are mentioned in Kieler, J. (1989). The Fibiger Institute 1949-1989. Copenhagen, The Danish Cancer Society, p. 18-19.

³⁸¹ Interview with Niels Ole Kjeldgaard 02.12.2004.

³⁸² Interview with Niels Ole Kjeldgaard 02.12.2004.

³⁸³ Klenow, H. (2003). "Some Selected Recollections from a Life with Biochemistry". Selected Topics in the History of Biochemistry: Personal Recollections VII. G. Semenza and A. J. Turner, Elsevier Science B.V.: 285-317, p. 305-306.

³⁸⁴ Kieler, J. (1989). The Fibiger Institute 1949-1989. Copenhagen, The Danish Cancer Society, p. 8.

The Cancer Centre That Never Was

research program in which tumour immunology and the elucidation of the malignant phenotype of the cancer cell were central themes.

However, in the opinion of the traditional physician Kieler, the import of young molecular biologists from the university, such as Jes Forchhammer, resulted in new but not necessarily welcome ideas on science management and the conduct of cancer research. The academic discipline and the professional logic of its practitioners brought with them an air of the 1968 student revolution that had introduced democracy into the concept of scientific leadership and undermined the traditional professorial power at the universities³⁸⁵. According to Kieler, the Fibiger Institute was “not confronted with the revolution of 1968, but we were confronted with its results to which we objected to various degrees, mainly depending on age and position, political orientations and possible also wisdom.”³⁸⁶ The introduction of molecular biology thus represented a multifaceted cultural clash at the Fibiger Institute, which was about political, organisational, but also professional differences. Forchhammer was the first in Denmark to apply molecular concepts and methods to the study of mouse cells transformed by oncogenic viruses, and according to Kieler this new program was popular:

This was a new program that attracted a number of young scientists from the university. With one exception they were trained in basic research and not in medicine, and none of them had any clinical experience. Thus, the engagement in the ultimate goal of cancer research – the prevention and cure of malignant neoplasia – remained a very theoretical issue which was completely overshadowed by the prospects of the personal career. They were intelligent, competitive, and very independent. They differed from the medical fellows not only by their background, their most valuable knowledge of basic research, and their laboratory training, but also by the fact that they were going to stay in experimental research for the rest of their lives, while most of the young medical fellows were looking forward to returning to the patients. For the senior staff whose members all had a hospital background the daily discipline, including working hours and collaborations was almost a reflex. Now it became a problem that gave rise to discussions in the laboratory and in the board of directors [a board mediating contact between the Executive Committee and the scientific research units of the Danish Cancer Society]. It was obvious that the chairman professor Sten-Knudsen and the director of the Fibiger laboratory, [Kieler], differed on this point as on most others.³⁸⁷

In this quotation, Kieler gives his personal experience of how personnel with different educational background act differently and reflect different types of logic. The medical doctor Kieler did not jump onboard the molecular biology bandwagon as it entered cancer research, which was an activity that had traditionally been dominated by physicians and not by basic

³⁸⁵ Ibid., p. 18.

³⁸⁶ Ibid.

³⁸⁷ Ibid., p. 18-19.

The Cancer Centre That Never Was

researchers. He had always promoted a mix of basic and clinically oriented cancer research and did not think that the basic biological disciplines were the most important. Others, such as biophysicist Sten-Knudsen and Kjeldgaard, felt differently and regarded the basic discipline as an important and progressive element of modern cancer research³⁸⁸. Therefore, they felt that the stagnation at the physician dominated Fibiger Institute and the lack of coordination in the cancer community had kept Danish cancer research from fulfilling its true potential, and that particularly the prominent chief of the private Fibiger Institute, Dr Jørgen Kieler, embodied the problem, as Kjeldgaard concluded in retrospect:

Sten-Knudsen was very critical of Kieler. That is, at the time we felt that perhaps Kieler dominated cancer research too much, and things like that, and in reality we discussed that there really was not much going on in cancer research. Therefore, Ove Sten-Knudsen and I suggested that we should try to make a report about cancer research. And then we got the others onboard.³⁸⁹

Kjeldgaard and Sten-Knudsen identified what they believed to be a problem in Danish basic cancer research, and they wanted to find out if they were right and if anything could and should be done about it through a survey of the country's cancer research. As mentioned above, Kieler and the Society's Executive Committee (then represented by Sten-Knudsen on the joint Executive Committee/Scientific Council/Fibiger Institute-board) had previously had troubles seeing eye-to-eye on central issues such as the management style and research policy of the Fibiger Institute, and it is thus not surprising that the Danish Cancer Society used the Kjeldgaard Report – which was written by the NSRC and the MRC (and not just people affiliated or previously affiliated with the Society) – to implement a (budget) reform that would help centralise power in the Society. However, this attempt to reduce the influence of the traditionally minded physicians such as Kieler, was naturally not the official reason why the Kjeldgaard Report came into existence, but Kieler and Ulrich were right to question the report's motivation, and they disagreed with its focus on basic research and definition of cancer research as a scientific strive to solve the riddle of the mechanisms of carcinogenesis on a par with the study of the clinical aspects of the disease.

Kjeldgaard's previous entry on the Executive Committee of the Danish Cancer Society must have been ominous for the two. In a Bourdieuan perspective, the private cancer charity was

³⁸⁸ I base this claim on the fact that Kjeldgaard was himself a molecular biologist working in cancer research, and that he and the biophysicist Sten-Knudsen were both authors of the Kjeldgaard Report which recognised molecular biology as an important weapon in the war on cancer.

³⁸⁹ Interview with Niels Ole Kjeldgaard 02.12.2004.

The Cancer Centre That Never Was

experiencing internal feuds due to the professional logics of its entrepreneurs: the managers of the Society's research units and the "newcomers" in the Society's central administration.

On the one hand, there was the clinically trained cancer researchers – like Kieler – who managed his research unit, shaped its research program's content, and administered the financial frame due to his professional logic and habitus. A logic strongly shaped by his medical training and place in the medical community that made him inclined to adopt its values and hierarchical managerial style: the virtue of clinical experience and the power of seniority. This was reflected in his managerial style in which he decided which research endeavours to support. On the other hand was the influx in the central management of persons such as Kjeldgaard, a molecular biologist with strong basic science logic and a different take on science policy. In contrast to Kieler, he had no clinical background and believed that the new biological sciences would contribute to the war on cancer on a par with the previously dominant clinical approach. Also, he did not come from or subscribe to the hierarchical seniority system of the medical world. He was a basic scientist from a university used to having his work and grant-applications subjected to a system of peer-review as a means of quality control, and the reforms he was about to carry through were expressions of such a system.

Kieler and Kjeldgaard held different types of capital as well. Kjeldgaard, being internationally renowned for his pioneering work within the field of molecular biology and nationally renowned for establishing the country's first department for molecular biology³⁹⁰ and initiating the Kjeldgaard Report, may have had the advantage of having the most visible accomplishments and the timing of the molecular bandwagon of cancer research (as mentioned in chapter 2). That is, to the broader scientific and medical community he must have represented a new and promising approach to cancer research while Kieler had not jumped onboard this bandwagon or delivered equally promising approaches lately. Because of his strong scientific standing and reputation, his national and international political engagement to strengthen molecular biology and cancer research with new state-supported initiatives, Kjeldgaard held the most symbolic capital within the Society. However, within the broader medical community, this may not have been the case, as Kieler was a trained physician – one of their own – and in an even broader societal context he may have had more social capital due to the fact that he had been part of the

³⁹⁰ Nielsen, A. K. and M. L. Thomsen (2006a). "I det biokemiske og molekylærbiologiske spændingsfelt". Viden uden grænser 1920-1970. H. Nielsen and K. H. Nielsen. Aarhus, Aarhus Universitetsforlag: 183-200, p. 197-200.

The Cancer Centre That Never Was

active resistance during the German occupation³⁹¹. However, the clash between Kieler's and Kjeldgaard's respective approaches to the war on cancer was reinforced; as yet another type of professional logic entered the Society's management.

For Kjeldgaard was not the only new face in the Society's management. Dr. Mogens Andreassen's eight-year-long term as chairman expired in 1981, and he was replaced by Aarhus-professor and physician Steen Olsen³⁹². The very same year, the Society's director tragically died, and Mr. Ole Bang took his place when he was appointed by a newly established Executive Committee led by Steen Olsen. While Kieler described the former direction as well-liked administrators who never meddled with scientific matters, he did not have the same praise for the provincial newcomers who had replaced them so abruptly:

We knew that the loss of this representative of old culture, warm humanism, and the best traditions of the civil service was irretrievable. After Mogens Andreassen followed the *Triumvirate*. It was also the era of the Province that put an end to the domination of the Capital. A well known pathologist from Aarhus, Professor Steen Olsen, who had left the Executive Committee of the Cancer Society in 1978 in protest against the policy of the society at that time, now became the president of the Cancer Society. His closest collaborator and advisor in the Executive Committee was Professor Niels Ole Kjeldgaard, a molecular biologist, also from Aarhus. Professor Kjeldgaard was only known to us as chairman of a committee which had recently published a report on basic cancer research in Denmark, a field in which he as a plant physiologist had not previously engaged himself. The third member of the *Triumvirate* was a banker from Odense, Mr. Ole Bang, who was appointed Mygind's successor.³⁹³

On the basis of their support of the Kjeldgaard Report, it would seem that both the physician Olsen and Kjeldgaard believed that basic natural science was in fact useful to cancer research and might eventually provide the "magic bullet" against the disease. They also shared the same views on research organisation and evaluation, and this was reflected in the Cancer Society's future policy, as will be elaborated on in the following chapters. In the above, it is clear that Kieler did not agree with this policy and even tried to undermine the scientific authority and capital of the new executives by referring to them respectively as a renegade and a plant physiologist with no experience in cancer research. It is true that Kjeldgaard had not worked in cancer research for very long, but he had never been a plant physiologist. Kieler's comment refers to the fact that Kjeldgaard's department for molecular biology was fused with the local

³⁹¹ For more on Kieler's role during the occupation, he has published his recollections: Kieler, J. (1993). Hvorfor gjorde i det? Personlige erindringer fra besættelsestiden i historisk belysning. Haslev, Gyldendal.

³⁹² KB (1981). Årsberetning, Kræftens Bekæmpelse, p. 2.

³⁹³ Kieler, J. (1989). The Fibiger Institute 1949-1989. Copenhagen, The Danish Cancer Society, p. 24.

department for plant physiology in 1976³⁹⁴, and the comment can be seen as an example of power play in which Kieler tried to obscure the role of basic scientists like Kjeldgaard in the traditionally physician dominated field of cancer research (undermining Kjeldgaard's scientific and symbolic capital) and as Kieler's attempt to defend the mode of hierarchical science management which he had been used to and through which the directors of the Society's research units got to shape the content of the research programs. A model, the Kjeldgaard Report and the new executives were now changing.

The incompatibilities between the views and professional logics of Kieler and those of the new management led to a long-lasting dichotomy. Olsen and Kjeldgaard were university professors and their views reflected a basic scientific logic, but as members of the Society's management they also had to adopt the goals and values of the private cancer charity as an independent private corporation that no longer merely functioned as an appendix to the medical world. The Society now followed its goal to fight cancer by using marketing strategies and making investments in order to protect its capital and secure the organisation's continued existence. The man who effectively helped implement this business-orientated professional logic was the Society's new director.

3.9 Modernising charity

The new director, Ole Bang, came from an entirely different culture than the researchers. He had been a successful banker and head of office in a series of charity organisations such as *The Danish Red Cross* and *The Danish Refugee Council*. He was the epiphany of an administrative culture, and in the words of Dr Bent Harvald who was to become Bang's colleague in the Cancer Society:

Ole Bang had a colossal economic instinct. He was what we physicians call a "DJØF" – no – he was the *super DJØF*! As a consultant at several hospitals, I had been involved in a lot of administrative work, but I had never met anyone like him.³⁹⁵

In Danish, the abbreviation "DJØF" designates membership of the association of Danish lawyers and economists and usually designates an administrator working within the public sector. However, the abbreviation is also used derogatorily about administrators in the public sector – especially in strictly specialist milieus such as the public health sector³⁹⁶. The physician

³⁹⁴ Kjeldgaard, N. O. (1993). "Molekylær Biologi i 25 år". 25 år: Institut for Molekylær Biologi. O. F. Nielsen. aarhus, Institut for Molekylær Biologi, Aarhus Universitet: 7-14, p. 12.

³⁹⁵ Interview with Bent Harvald 01.02.2005.

³⁹⁶ Dahler-Larsen, P. and N. Ejersbo (2003). Djøficering - myte eller realitet? Århus, p. 7.

The Cancer Centre That Never Was

Harvald thus seems to have used the term in a blurry and not so nuanced manner, showing that he did not take Bang's experience from the private business world into account. Bang was thus not the classical DJØF-type, because these usually did not have any experience from the private sectors. Bang, however, represented a private corporate professionalism and a business logic, and to Harvald, any non-physician working in an administrative position must have been a DJØF. In that respect, he may have shared this view with most medical specialists. It was thus a man from the private corporate sector with progressive administrative and fundraising ideas who entered the scene and was given the job to serve an "old-fashioned, but at the same time well-operated organisation"³⁹⁷.

He assigned a high priority to a rational pursuit of the organisation's goals and securing funds for its continued existence, and he introduced new fundraising methods to do so. All this reflects aspects of what can be termed business logic. With the introduction of Bang, Olsen and Kjeldgaard, changes were thus bound to be made in the private charity and its research units, and perhaps Bang heralded a new era for cancer physicians at the hospitals as well, as the biomedical field in both the private and public sectors would be subjected to a new business-inspired management philosophy throughout the 1980s³⁹⁸. As mentioned above, this was already heralded in the 1970s with the county takeover of hospitals as economically motivated political prioritising in the funding of hospitals replaced the economic boom's *carte blanche* for the medical staff.

Recent literature argues that the described process or "DJØF'ication" of the health sector was more likely a culturally dictated perception rather than an actual phenomenon supported by statistics³⁹⁹. It is not within the scope of this thesis to describe the influx of new types of leadership/management in the public sector. However, as I will argue in the following chapter, Bang was to become the front figure of the Society and his fundraising skills were about to change the influence of the organisation, but he was hired by his management and did his job by implementing *its* policy – not his own. A policy made by e.g. Kjeldgaard and Olsen, and which clashed with the clinical-medically orientated logic of the most traditionally minded physicians in the cancer community.

³⁹⁷ Bang, O. (2004). *En personlig beretning om Kræftens Bekæmpelse 1981-1994*, Narayana Press, p. 7.

³⁹⁸ On new public management in the 1980's, see: Wood, C. (1995). "The "New Public Management" in the 1980's: variations on a theme." *Accounting, Organizations and Society* 20: 93-109.

³⁹⁹ Dahler-Larsen, P. and N. Ejersbo (2003). *Djøficering - myte eller realitet?* Århus, p. 19-23.

The Cancer Centre That Never Was



Ole Bang

One of the first political changes to be made was a budget reform inspired by the Kjeldgaard Report's findings, namely that the most cited publications sprang from research that was primarily financed through project-oriented grants. These research projects had been through a peer review process (e.g. in the public research councils or the Scientific Council of the Cancer Society), and the Report concluded that because sufficient funds were not available to satisfy all applicants, the different research councils had to prioritise according to the quality and cancer relevance of the projects. In this way, only the best possible research projects would receive financial backing. At the Danish Cancer Society, however, the process was a bit different. The directors of the charity's three research units had traditionally received core grants to cover expenses for housing, maintenance, equipment, salaries *and* their research programs. Thus, the unit directors were given financial leverage to assess which research projects to support or terminate. The new budget reform tried to implement the findings of the Kjeldgaard Report by making the charity's own researchers apply for funds through the Society's Scientific Council in direct competition with the publicly employed researchers who could apply on the same terms⁴⁰⁰. All in direct accord with the basic science logic of Kjeldgaard.

On a practical level, the reform deprived the unit directors of their mandate to design the research program of their own institutes. Some of this power had now been assigned to the Scientific Council of the Society and to the State's research councils. Naturally, this evoked a lot of anxiety and anger amongst the Society's researchers as they were no longer guaranteed funds for their research. In addition, an *International Scientific Advisory Committee* (ISAC) was established to make continuous evaluations of the scientific work at the Fibiger Institute and the

⁴⁰⁰ Ole Bang: "Notat vedr. Oplæg til basisbudgetprincipper og -retningslinier for institutterne" (08.02.1983). Personal papers of Jes Forchhammer (Bagsværd).

The Cancer Centre That Never Was

Cancer Research Institute in Aarhus, to comment on their research plans, and to advise the Society's management with regard to budgeting and science policy. This committee consisted of a number of international cancer researchers who would visit the two institutes once a year, assess the publications of the institutes, and subsequently write an annual report with their findings and suggestions for improvement⁴⁰¹. Many of the Society's researchers and members of the Scientific Council argued that the ISAC was yet another way to restrict the mandate of the research units' directors⁴⁰². In this way, it appears as if the Kjeldgaard Report was used to justify the implementation of a new power balance and structure within the Danish Cancer Society, so that the cancer charity could support the war on cancer in the way the new management believed to be most efficient⁴⁰³.

In a Bourdieuan perspective, the private cancer charity experienced internal feuds due to the clashing professional logics of its entrepreneurs. As mentioned above, it was a clash between medical logic, basic science logic and the new business inspired logic of Ole Bang. They clashed on important issues such as management and content of research programs at the Society's units and on what constituted efficient operation of the cancer charity in general. While Kjeldgaard seemed to possess more symbolic capital than Kieler in the cancer community because of his scientific and political achievements, Bang was a non-scientist from an administrative culture with little or no recognition in the broader and physician dominated cancer community. He nevertheless was awarded great influence and standing as director of the Cancer Society, as the executive committee (consisting of both physicians and basic scientists taking on an administrative role) acknowledged his potential value for the Society and the war on cancer inasmuch as his skills and business logic could modernise the old-fashioned charity to yield better results and gain more political influence.

But Bang's logic and the business inspired changes he brought with him did not resonate well with some of the Society's physicians who regarded the DJØF'ification process with anxiety. The Society's internal feuds on these matters indicated that it would probably not be easy to unite the rest of the cancer field's entrepreneurs in a joint cancer centre, seeing that the field was

⁴⁰¹ Ole Bang: "Forslag til regler for en videnskabelig rådgivningskomite for Fibiger –Laboratoriet of Kræftforskningsinstituttet i Aarhus", DVU-møde 23.09.1982. Personal papers of Jes Forchhammer. (Bagsværd).

⁴⁰² DVU (1982). Mødereferat fra Det Videnskabelige Udvalg 23.09.1982. Bagsværd, Personal Papers of Jes Forchhammer., p. 2.

⁴⁰³ This meant that a special research program in environmental carcinogenesis that had been led by Kieler and received its financial backing from special pool funds would eventually be terminated, and the Fibiger Lab would suffer budget cutbacks.

marked by so many different views on the centre's content, management and placing at large. Power struggles were bound to happen.

3.10 A centre takes form

The new management of the Danish Cancer Society did not find it appropriate for a private cancer charity to have and finance its own research institutes. When funds were being tied up in bricks and mortar buildings, the Society could not easily pursue its ambition to strengthen Danish cancer research by always using the money entrusted to the Society in the best possible manner. The Society wanted to support new initiatives which the public research councils were not able or likely to support⁴⁰⁴. If these initiatives proved to be scientifically tenable and fruitful, the Society would press to make the public authorities take over the projects. In this way, it was and would continue to be one of the Society's finest tasks to insist that the State should live up to what – the Society claimed – was its responsibility to support the war on cancer, by constantly pointing to deficiencies and solutions⁴⁰⁵.

However, this could only be done if the Society did not permanently take on tasks that morally belonged under the aegis of the State. The operation of several cancer research institutes was just that. According to the new director, Ole Bang, the main strategy of the Danish Cancer Society was to set new research initiatives in action with very little funds to do, so e.g. the establishment of the Cancer Registry, and if the initiatives proved viable the Society would aim at having the public authorities resume responsibility for the initiatives' continued existence.⁴⁰⁶

The Danish Cancer Society wanted to hand over their research institutes to the State in order to secure a flexible funding system – the spearhead ambition. Although the Kjeldgaard Report had not had the mandate to tell the private cancer charity what to do, it had hinted at this solution. It was a break with the strategy that during the scientific expansion in 1950-1970 had prompted the Society to push for a private realisation of the cancer centre dream in the hope that operating research units would be good PR. Now, the Danish Cancer Society did not want to hand over the important research institutes unless the State could guarantee that the researchers would be given the same or even better working conditions. This was a promise which the State could not easily make in times of recession, but the Kjeldgaard Report's recommendation of speedy coordination of cancer research through the establishment of comprehensive cancer centres gave

⁴⁰⁴ Rules and regulations of the Danish Cancer Society (with comments), (1993), *Personal Papers of Ole Bang, Copenhagen*. p. 3.

⁴⁰⁵ Bang, O. (2004). *En personlig beretning om Kræftens Bekæmpelse 1981-1994*, Narayana Press, p. 9.

⁴⁰⁶ *Ibid.*, p. 21.

The Cancer Centre That Never Was

the Society hope that the time was ripe for the transfer – now that the NSRC subcommittee was trying to expand the institutional matrix sufficiently and revive the idea of a comprehensive cancer centre – as Chairman Steen Olsen argues in the following:

The idea of coordinating the cancer research laboratories (public as well as private) in the different geographical regions and in close proximity to the clinical oncology departments is eminently important. It is first and foremost necessary, and can most easily be established in Copenhagen, and efforts are being made to put the idea into practice. Further negotiations about this await only the final decision as to where the clinical oncology departments will be placed. The Society and its established research institutes participate positively in these efforts. It must be stressed that we do not have the remotest intention of shutting down these institutes. They have made themselves a (national and international) reputation through extensive and renowned work, and it is understandable that the Danish Cancer Society wishes to preserve their identities. At the same time, it is preferable for the State to take on part of the expenses, and in the long run become fully responsible for the operation of the institutes. Thereby, the Danish Cancer Society will release a lot of funds which can be channelled to projects in need of support through our Scientific Council – be that in public or our own laboratories. Regardless of the financial conditions, the Danish Cancer Society will work to create coordinating frames for the cancer research activities that are being pursued in Copenhagen.⁴⁰⁷

The coordinating endeavours which Olsen referred to were inspired by the Kjeldgaard Report. Since 1980, Rigshospitalet had had plans of moving the Finsen Institute (and thereby the Finsen Laboratory) to the site of Rigshospitalet as a result of new legislation pressing for a public takeover of the Finsen Hospital, just as Jørgen Kieler from the Fibiger Institute had predicted⁴⁰⁸. Rigshospitalet had therefore planned to move the research groups at the antiquated Finsen Institute into the modern buildings on Blegdamsvej where Rigshospitalet resided (see appendix E). Then, the University of Copenhagen and the Danish Cancer Society expressed an interest in coordinating *all* the cancer research in Copenhagen, and the hospital's expansion plans were thus changed to include a *comprehensive cancer research centre* as well⁴⁰⁹. Such a centre would unite the cancer research groups at Rigshospitalet, the Finsen Laboratory, the University, the Cancer Registry, and the Fibiger Institute. The latter was particularly interesting to the State, as it had specialised in laboratory-based oncology research and was thus ideal for placing in close

⁴⁰⁷ Note from the chairman Steen Olsen to the Scientific Council of the Danish Cancer Society (1982), Personal Papers of Jes Forchhammer, (Bagsværd), p. 3-4.

⁴⁰⁸ Koordinationsgruppen (1982). Redegørelse om Rigshospitalets rammer. København, Rigshospitalet: 59., p. 22. Review from the Ministry of the Interior: "Redegørelse til folketinget om Rigshospitalets fysiske rammer", 16.02.1984. , *Personal papers of Ole Bang*, (Copenhagen). p. 1.

⁴⁰⁹ DVU (1982). Mødereferat fra Det Videnskabelige Udvalg 23.09.1982. Bagsværd, Personal Papers of Jes Forchhammer. p. 4.

The Cancer Centre That Never Was

connection with Rigshospitalet's planned oncology centre that was to include the Finsen Laboratory⁴¹⁰: a bench-to-bedside type of centre.

Put in short, the plans included coordination on several levels which was in accordance with the recommendation of the Kjeldgaard Report and (coincidentally) the US criteria for comprehensive cancer centres:

- 1) A coordination of medical specialities and basic science disciplines. A difficult task considering the fact that the proponents of these often held different and incompatible views on the approach to cancer research, science management and of each other.
- 2) A coordination of differently managed private and public organisations. The integration of the private Society's research units in the centre was one thing, but the fusion of public university and hospital departments with each their different (hierarchical) structures and managerial modes was no less problematic. Which mode should be employed in the centre?
- 3) A physical coordination. The centre was supposed to be a physical entity bringing the different parties under the same roof. The centre was not only about disciplinary coordination and collaboration; it was about physical coordination/proximity. And a common ground had to be found on this issue as well, literally.

The centre plan was only an addition to a forthcoming fusion of the small Finsen Hospital with the large Rigshospitalet. As an addition in times of recession, the centre would have to be built without making the existing hospital plans more expensive. That is: the addition meant more initiatives for the cost of one! And why? The Minister of Education had already put the costly expansion plans of Rigshospitalet on hold because of the recession, and he wanted to analyse possible cost-efficient alternatives to the proposed plans which gave an opening for new suggestions such as the inclusion of a cancer centre provided that such coordination of Copenhagen cancer research could be carried out without additional funds for the already planned hospital move!⁴¹¹ In essence, such plans would have to be carried out within the existing institutional matrix and without additional funds compared to what the hospital fusion

⁴¹⁰ "Annual report of the chairman of the Danish Cancer Society (1982).", *Personal papers of Ole Bang*, (Copenhagen), p. 3.

⁴¹¹ Letter from the Ministry of Education to the MRC, March 3rd 1983, *Personal papers of Ole Bang*, (Copenhagen), p. 1-2.

Letter from the MRC to the Ministry of Education, June 17th 1983, *Personal papers of Ole Bang*, (Copenhagen), p. 1.

The Cancer Centre That Never Was

was already getting; just as the foremen of the two research councils (the MRC and the NSRC) had anticipated and feared at the publication of the Kjeldgaard Report with its bold recommendation to change formal institutions.

The proposed move of the Finsen Institute to a special wing of Rigshospitalet was considered to be an all too expensive solution, and the Ministry of Education therefore asked the hospital and the MRC to find alternative and cheaper models. The Finsen Institute could either stay put at its location on Strandboulevarden (the Finsen campus) and have its antiquated buildings modernised, or be moved into the Rockefeller complex on the campus of Rigshospitalet at Blegdamsvej (see appendix E). The establishment of a comprehensive cancer centre would greatly depend on the fate of the Finsen Institute, and the two alternative locations were vividly discussed by Rigshospitalet, the National Board of Health, the MRC, the Medical Faculty of Copenhagen University, and the Danish Cancer Society⁴¹².

Although it had been an old dream of Engelbreth-Holm to establish a cancer centre on the Finsen grounds back in the 1940s, the modernisation of the Finsen Institute on Strandboulevarden did not appeal to any of the involved parties. The buildings dated back to the turn of the century, and it was generally felt that even if they were expensively modernised and upgraded, the buildings were too worn-out and old-fashioned to be able to accommodate the needs of modern research and rational hospital management 10-15 years into the future⁴¹³. There would inevitably be a need to rebuild the Finsen Institute at this point, and the solution could very well end up being much more expensive than rebuilding the Rockefeller complex on Blegdamsvej to fit the needs of the Finsen Institute and a comprehensive cancer centre. The first model would amount to approximately DKK 281 million in immediate construction costs, whereas the second model would amount to DKK 375 million⁴¹⁴.

However, as the first model would almost certainly result in further construction work a decade later, the second model was considered the best and cheapest solution by almost all involved parties. The 375 million DKK was to be spent on the establishment of 10,000 square meters of underground installation for radiation therapy under the Rockefeller complex, and the different interested research units would be placed above ground in the buildings on Blegdamsvej and

⁴¹² Except for the MRC, all of these institutes were interested in moving one or more of their research groups into the centre.

⁴¹³ Review from the Ministry of the Interior: "Redegørelse til folketinget om Rigshospitalets fysiske rammer", 16.02.1984. , *Personal papers of Ole Bang*, (Copenhagen), p. 1.

⁴¹⁴ Ibid, p. 7.

The Cancer Centre That Never Was

Juliane Maries Vej which constituted the complex. The National Board of Health and the management of Rigshospitalet preferred the Rockefeller solution to the one on Strandboulevarden⁴¹⁵. Although they did not have any formal say in the final decision as to where to put the Finsen Institute, managers and researchers from outside the realms of Rigshospitalet discussed the matter as well. As the discussions of a cancer centre evolved, more administrative representatives of the different institutes were involved as will be evident in chapter 4.

The MRC took it upon itself to organise and coordinate further negotiations between the parties involved, and even if the restrictive financial policy of the new government had made most parties doubt that the plans would be put into practice in the near future, the parties' proposal of a cancer centre had made its impact on the government. Or at least it made a minor dent. Although no additional funds were allocated for the purpose, the formal institutions set by the government did not directly oppose a cancer centre, provided that it was built for free. The following year, the Ministry of Education surprisingly invited all the interested organisations to join an MRC-established working group with the objective of continuing the discussions of coordinating cancer research in Copenhagen⁴¹⁶. Given that the Minister of Education had not granted any extra allocations for the establishment of a cancer centre and had actually put the expansion plans of Rigshospitalet on hold because of the restrictive financial policy of the government, the Minister's initiative in establishing a cancer centre might be interpreted as an empty political gesture – a strategic manoeuvre to please the crowd by presenting the seemingly popular cancer centre without any extra costs. But could this be done through rational planning? Had the notion of a cancer centre become an obvious tool to score points with the electorate? Or was the government just careful not to invest in projects that could be financed by others, because it was trying to bring down the national debts established in the 1970s.

The government was out to trim the public sector through rational planning, and while no actual budget cuts were made for the hospitals, the lack of annual budget growth must have felt much like severe budget cuts and downsizing. The government quickly became synonymous with these concepts as it bade counties and municipalities to stop public growth and to take on new public responsibilities without additional money to do it for⁴¹⁷. The freezing of hospital

⁴¹⁵ Ibid.

⁴¹⁶ Ibid.

⁴¹⁷ Jacobsen, K. and K. Larsen (2007). Ve og Velfærd - Læger, sundhed og samfund gennem 200 år. København, Lindhardt og Ringhof, p. 456-57.

The Cancer Centre That Never Was

expenditures led to a remarkably low cost increase of 4.6% over ten years from 1980-90⁴¹⁸. The public authorities were pressed to balance the economic strategy with an increasing number of hospital admissions, the public demand for better and more expensive treatment modalities etc. Making decisions about which diseases and patients to prioritise within the existing budgets was inevitable and unpopular with both the medical community and the Danes in general. The plan to place a cancer centre within the hospital for no additional money should be seen in this political framework, and the establishment of a working group of enthusiastic members believing in the cause despite the zero-sum game could be an expression of the cancer community's efforts to make the "umbrella-like" concept of cancer research seem uniform and politically appealing. The unfortunate zero sum/no growth game was the only chance to do so.

The working group consisted of members of the Danish Cancer Society, the University, Rigshospitalet, the Finsen Institute, and the MRC and the NSRC. The working group would elaborate the proposal for a cancer centre on the Rockefeller grounds, and they insisted that the oncology departments of the Finsen Institute (and not just the laboratory) be included in the centre.

All except for the representatives of the Medical Faculty of the University were in favour of the idea of establishing a cancer centre at the Rockefeller complex⁴¹⁹. The University representatives, on the other hand, feared that the establishment of a cancer centre at the Rockefeller complex and the adjacent buildings on Juliane Maries Vej would physically interrupt the research and education at the Medical Faculty, as the institutes in these buildings and at the faculty's Panum Institute were deliberately and strategically placed in order to

⁴¹⁸ Ibid. The exact costs are 1980: 30.2 billion DKK 1990: 31.3 billion DKK.

⁴¹⁹ The Carlsberg Biological Institute was also situated in the area in question, and as this institute had originally been built for cancer research, a member of the Danish Cancer Society's Scientific Council – professor Martin Ottesen – suggested that cancer researchers might have "certain moral rights to this building". Still, the planning group of the different institutes preferred to move the Cancer Registry, the Fibiger Institute and the Finsen Laboratory to the Rockefeller complex, in order to execute the first step of the plan to establish an actual (comprehensive) cancer centre in connection with the clinical oncology departments. This proved to be a wise decision, as the management of the Carlsberg Foundation decided to close the Carlsberg Biological Institute in 1982, and it was seen as yet another example of how time was running out for private research institutes revolving around a single charismatic researcher.

See: DVU (1982). Mødereferat fra Det Videnskabelige Udvalg 23.09.1982. Bagsværd, Personal Papers of Jes Forchhammer., p. 4.

Kræftens Bekæmpelse: "Annual report of the chairman of the Danish Cancer Society (1983).", *Personal papers of Ole Bang*. (Copenhagen). p. 3.

Rasmussen, L. (1982). "Virksomheden på Carlsbergfondets Biologiske Institut i professor Erik Zeuthens forstandertid". *Årsskrift for Carlsbergfondet 1982*. Carlsbergfondet. København, Rhodos: 46-51, p. 51.

promote interdisciplinary research collaboration and optimise the medical training of students⁴²⁰. If the Fibiger Institute and the Finsen Laboratory were to be moved into the Rockefeller complex, other institutes would have to be moved out and this could disrupt the carefully planned organisation of the Medical Faculty.

Nevertheless, the Faculty eventually complied when Rigshospitalet and the Ministry of the Interior finally decided to move the clinical units of the Finsen Institute to Blegdamsvej, and the location of a future comprehensive cancer centre was now in place: the Rockefeller complex⁴²¹. In this way, the cancer centre would move closer to the American NCI-definition of “comprehensiveness” and to Engelbreth-Holm’s dream of a cancer centre with both treatment of cancer patients and basic, clinical, and epidemiological cancer research. Were the pieces of the puzzle finally falling into place?

3.11 Perspectivating summary

In 1981, a report on the state of Danish cancer research was issued by the State’s Natural Science Research Council (NSRC) with the bold objectives of changing the formal institutions for cancer research and of improving the conditions for the cancer field in general through a series of recommendations. University professors and NSRC members Niels Ole Kjeldgaard and Ove Sten-Knudsen wanted to reorganise and coordinate the field of basic cancer research in Denmark. Based on their own and their colleagues’ experiences with the research milieus at the private Cancer Society’s Fibiger Institute in particular, they argued that the field had stagnated and was dominated by traditionally minded physicians such as the head of the Fibiger Institute, Jørgen Kieler, who did not appreciate the influx into cancer research of university molecular biologists with no clinical experience. They represented a new basic science approach to cancer research and argued that the field had to be modernised – privately and publicly – to deliver future results. And although the state of the research done within the private Cancer Society was not the official reason for them doing so, the two persuaded other NSRC (and MRC) members to initiate a state-supported survey of Danish basic cancer research.

The published results and recommendations became known as the Kjeldgaard Report. The Report’s bibliographical studies revealed that publications from the Society’s privately owned research units (such as the Fibiger Institute) were generally cited less often than the publications

⁴²⁰ Letter from Ove Nathan to the Ministry of Education, September 5th 1983. *Personal papers of Ole Bang*, (Copenhagen), p. 1-2.

⁴²¹ Note from Keld Danø, June 1st 1984. *Private papers of Ole Bang*, (Copenhagen), p. 3.

The Cancer Centre That Never Was

from the hospitals and universities. If this could be seen as a measure of the quality of the research done there, the private research units were in need of improvements. Seeing as the Report had also found that the most cited publications came from research groups supported through discretionary funds obtained in free competition, the Report indicated that the private Cancer Society would do well by making budget changes so that its institutes would no longer receive project funding through their core budgets, but through a peer reviewed process and in direct competition with each other and extramural researchers. The management of the Cancer Society agreed with the Report and readily used it to implement such a budget reform. This was a reform that, much like the Kjeldgaard Report had hinted towards, deprived the research directors of influence over the research profile of their units, as it was now up to the Society's Scientific Council, the MRC, and/or the NSRC to award grants in aid to worthy projects from the private units, if they were deemed qualified.

In essence, this meant that the Kjeldgaard Report became the occasion for a change in the scientific profile of e.g. the Fibiger Institute, and Kjeldgaard himself was appointed member of a new management of the Cancer Society that with the help of a new director from the private business sector would use business-inspired managerial style and reforms to modernise the private cancer charity. In the context of the private Cancer Society, the Report had the following consequences:

Budget reforms: The Report led to budget reforms that would deprive the directors of the Society's research units of their unchallenged influence on the units' research profile and project support, as the reform introduced a peer-review system through which the intramural researchers had to compete for funds on a par with extra mural researchers so that only the best projects would prevail. This reform mirrored the basic-science logic of Kjeldgaard and clashed with the medical logic of e.g. the Fibiger Institute's medically trained director, who subscribed to the hierarchical managerial style of the medical/hospital sector in which seniority meant that the director would traditionally have full control of finance and research profile. The reform thus embodied a clash between a new molecular biology approach to cancer research which was traditionally dominated by physicians with clinical experience with patient care, and those who did not rave at the sight of the molecular bandwagon that was internationally heralded to bring progress to the cancer field. Nevertheless, due to the stronger symbolic capital of Kjeldgaard (international scientific reputation for his work and his political engagement in and for national and international scientific agencies and councils), the Society favoured Kjeldgaard and his

The Cancer Centre That Never Was

views over Kieler's through the budget reform. Also, the scientific logic of Kjeldgaard was in fine accord with the new director of the Society, a representative from the private business sector, Ole Bang, who also wanted to use the resources of the charity in the most rational manner, and the introduction of this business logic reinforced the effects of the Kjeldgaard report on the Society.

Power struggles: The internal power-struggles on symbolic capital due to differences in professional logics in the wake of the Report made it clear that there was a clash between management and other parts of traditionally physician dominated cancer charity. It was not a homogenous unit with a clear cut and common vision and mission. It was no longer a unit of physicians subscribing to an orthodox acceptance (doxa) of unchallenged medical influence and power in the organisation. The introduction of newcomers with other types of professional backgrounds, logics and capital made it possible to contest the standing symbolic capital.

Within a larger political context, the Report tried to change formal institutions for cancer research by suggesting that the State made cancer research a special priority – an area of strategic importance – by establishing a special strategic State cancer research fund (in addition to the Research Council's support for cancer research projects) and that the State revived the idea of wide-ranging (or comprehensive) cancer centres in Denmark. These recommendations were an attempt to re-actualise the formal institutions and path created by Hartvig Frisch in 1949, although the idea of the centre now took on a different form than in the time of Frisch and Engelbreth-Holm who had originally focused on a national cancer centre. The recommendation was now to establish a series of coordinated centres in connection with the country's medical faculties, of which only the one in Copenhagen had been fully established in the 1940s, and it therefore did not make sense then to talk of more than one centre.

But although the form was now geopolitically different, the content of the centre idea was still the same and as ambitious as ever: the coordination of medical specialties and basic science disciplines in order to bridge the gap between bench and bedside and deliver directly applicable breakthroughs in the war on cancer, which was otherwise fought by research groups scattered all over the country and which often had only little contact with each other. A rhetoric of unity in the cancer research field was established in the Report to attract more funding.

The Report's recommendations were bold. However, some parts of the biomedical community feared that the Report expected too much from the public authorities who could not easily

The Cancer Centre That Never Was

channel additional funds into cancer research without taking them away from other worthy research areas. Especially since the 1980s recession had brought the Danish government to enforce a strict financial policy with a zero-growth-principle for the public sector. The formal institutions did not favour what the Report recommended. And indeed, the Report did ask a lot of the State. Perhaps more than a lot in order to carry through the proposed initiatives: it was not just a plea to establish a fund and some cancer centres. It was a plea to change the way the government initiated strategic research programs. If the State was to establish a fund as described by the Report, where the research councils were in full control, the different ministries relevant to the cause would have to pool their respective funds and set aside internal competition and channel money, influence and power into the initiative. And as this was not common practice in the government's different ministries (that did not then include a ministry of research or cross-ministerial research policy agencies), such change of formal institutions was not likely. It would at least be very difficult to carry through such a change of practice without compelling evidence for the benefits of the fund and the centres. And these unfortunately seemed to be missing in the Report.

The Report was criticised by statistician Inge Henningsen for making its recommendations without presenting proof that they were in fact means to strengthen and coordinate Danish cancer research. In particular, the recommendation to establish comprehensive cancer centres seemed to be based more on the personal preferences of the cancer researchers that participated in the survey which the Report was based on, rather than on statistical data or international literature on the advantages and disadvantages of such organisations. That is, it created informal institutions for a centre in the form of the taste and preferences of an apparently united cancer field rather than in the form of actual statistical evidence. In fact the Report's statistical material indicated that a centre dedicated entirely to cancer research would *not* be the tool to yield research with the most international impact compared with that of the state-operated universities and hospitals. Nevertheless, the recommendation resonated well in the Danish cancer community. And to some extent also within the government even though there was not a thread of evidence to support the cost-effectiveness and benefits of such a construction in the Report. In fact, there was evidence of the opposite, but the Report was never widely discredited. And why was that?

- 1) It was the first state-initiated survey on cancer research. As such it was an important document for the cancer community (irrespective of clinical or basic science persuasion)

The Cancer Centre That Never Was

as it somehow lend a stamp of state approval to the umbrella-like concept of cancer research that was not an independent and recognised academic discipline at the universities, just like oncology was not a medical specialty at the hospital with the status such categories imply in the medical and scientific communities. It was a first step towards a more prestigious identity, coordination and better funding of the cancer field. And the Report's questionnaires revealed that most cancer researchers pointed to comprehensive cancer centres as the tool to secure all three of these things, as they had seen in the American Cancer Program of 1971 (even though this program's establishment of cancer centre networks was later discredited by many). So the personal beliefs triumphed over statistical evidence.

- 2) The Danish Cancer Society used the Report as a pretext to carry through internal reforms, and therefore had no desire to discredit it.
- 3) Although the State (the ministries) never did change the formal institutions in the form of a state cancer research fund or increased funding of cancer research in general, the idea of the comprehensive cancer centre had a footing in the cancer community as the tool to obtain progress in the war on cancer, and few politicians dared to oppose this agenda. Therefore, the idea of the cancer centre was not taken off the table in spite of the missing proof of concept. But the politicians promoted it under the existing institutional framework and for no extra funds – as part of an already planned fusion of two hospitals – so the political risk was minimal. In reality, however, the formal institutions were hardly accommodating towards the centre as it would require mastery of innovation to expand the existing (and already downsized) hospital plans with a cancer centre for no additional funds.

In spite of a complete lack of evidence, the plan for a comprehensive cancer centre was pursued, as the Minister of Education, Bertel Haarder, saw fit to include such an initiative in existing hospital plans if it could be done for essentially for no extra costs. The Cancer Society, the MRC, Rigshospitalet and Copenhagen University made plans to establish a joint state-private centre at the Rockefeller Institute in Copenhagen, even though the task must have seemed difficult at best.

Was there a rational basis for this development? The Report's recommendations were not supported by its own statistical data, the Report never succeeded in changing the formal institutions needed to carry out the recommendations of a fund and a centre as envisioned by the

The Cancer Centre That Never Was

Report's authors, there was a financial recession, and the government had no tradition of making cross-ministerial collaborations on the matter of strategic science policy initiatives. It was thus no surprise that the Report's recommendations were not carried out as described. It was, however, remarkable that the Report somehow managed to revitalize the idea of the cancer centre to the extent that the Minister of Education allowed it to be part of a cost-neutral expansion of existing hospital plans in the Copenhagen area. And the cancer community jumped at the chance in spite of the existence of what in retrospect should have served as red warning lights:

- 1) A lack of institutional change meant that the government did not take on leadership and prioritise the centre plans. A cancer centre was cordially allowed into existing plans if the planners could find a way to establish the centre at no cost. There was no state leadership or incitement to bring the many different parties together and make them agree on a common research program. Because this was not a strategic initiative of the State with well-defined and top-down dictated purposes and content. Seeing how the same matter gave rise to serious intramural differences of opinion within the private Cancer Society, a consensus amongst many different public and private organisations would probably not be easy to reach.
- 2) Because the initiative had to be carried out under the existing institutional matrix and as part of already existing plans to move the Finsen Hospital to Rigshospitalet, the Minister of Education, Bertel Haarder, effectively forced the cancer community to plan a centre for no additional public funds – and worse – by basing the plans on an already (at least almost) decided on location as the first step of the planning process. And this went against all recommendations from the Washington conference on the planning of cancer centres, which stated that planners would do better by taking the following steps: a) reach consensus on a common research program for the centres inhabitants, b) decide which research groups to move into the centre, c) appoint a director and organisational style for the centre, and d) find a proper location. In fact, the conference stated that the model of planning on the basis of a location was old-fashioned and inappropriate.

As chapter 4 will show, the maintenance of the existing institutional matrix and the frames set by the government for the planning of the cancer centre – with its lacking top down leadership and strategy – resulted in a power vacuum that made it almost impossible for the different

The Cancer Centre That Never Was

planning parties to agree on any of the Washington recommendations. But then again, these recommendations were probably not known by any of the planners, and they enthusiastically tried to plan for an essentially irrational scheme under less than optimal conditions and starting points. The attempt to create a cancer centre under quite hostile formal constraints (the zero-sum-game) would probably leave the funding responsibility with the private Cancer Society which could explain why the public planning parties stayed at the negotiation table even in the face of minimal state subsidies. Whereas a targeted cancer centre had not been the tool to attract additional public funding to the hard pressed public researchers in worn down laboratories, the cancer centre could perhaps attract more from the private Cancer Society. In this respect, the public organisations acted rationally by continuing the planning process in order to utilize the existing institutional matrix. They delivered the favourable informal institutions that had been absent from the Society's previous attempts to create a centre during the scientific expansion.

The Cancer Society, on the other hand, acted more irrationally. Facing no additional state funding or prospects of a state take over of its research units, the charity was not likely to recreate the centre-friendly institutional matrix of 1949, when it had managed to make the State assume some financial responsibility for a shared project and thereby fulfil its spearhead ambition not to invest in bricks and mortar and so forth. In fact, the government's zero-sum-game effectively forced the financial burden onto the shoulders of the private charity. While it and its public planning parties may have hoped that the government would eventually cave and give extra funding for the project, they would at least have had to consider the possibility of that not happening and planned accordingly. The Cancer Society stayed in the planning process. With no prospects of handing over its research units. With no prospects of fulfilling its spearhead ambition anytime soon. It stayed.

In an institutional perspective, it stayed on the path of the cancer centre in spite of formal constraints hindering positive feedback. Just as it had done during the 1950-1970 era, in which informal constraints had prevented the Society from realising its dream and – essentially – its organisational strategy for continued existence. Back then, the rationale seemed to have been to hold on to its research units until more favourable informal institutions would occur, because the units served as good PR in times when the State had finally assumed responsibility for cancer treatment at the Society's radium stations. Now the situation was different with no apparent returns at all. The Kjeldgaard Report re-actualised the centre dream, but the Society locked in on its path.

The Cancer Centre That Never Was

Summing up from a path dependence perspective, this meant that the Kjeldgaard Report re-actualised the path created with the establishment of the Fibiger laboratory in the late 1940s, although this path had never been productive with increasing returns in the sense that the proposed (comprehensive) cancer centre with continuous state-funding had never been fully established. Instead this path was full of obstacles in the form of formal and informal constraints: lack of state-funding, building restrictions on the Finsen campus, no backing from public researchers, and the Fibiger Lab staff's reluctance to move back to Copenhagen from Lyngby. In spite of a complete lack of evidence that the idea of a state-financed cancer centre was the right tool to coordinate a Danish war on cancer – in fact there was evidence to the contrary – the Kjeldgaard Report mirrored the subjective taste and preferences of the country's cancer researchers who supported the idea of the state-financed comprehensive centre, and it recommended to the State the building and financing of a comprehensive cancer centre.

No alternatives to the idea of the cancer centre were scrutinized in the Report, although its own statistical material pointed towards organisational alternatives to – and away from – the idea of a specialised cancer centre. And as choosing the irrational in the face of better alternatives can be seen as a mark of path dependence, it thus seems likely that path dependence occurred. A path was created in 1949 but yielded no increasing returns, it was re-actualised by the Kjeldgaard Report, and it was then perpetuated/locked-in by the decision to start planning for a state-financed centre at the university hospital's Rockefeller Campus, even though the State could not commit to setting aside the necessary funding for it, no formal institutions were changed to make cancer research a strategic priority of the state, the planners would have a hard time seeing eye-to-eye on central issues, and although the starting point of the planning process was existing hospital plans which according to a Washington conference on the topic of planning cancer centres was not appropriate for a good planning process. Still, the outlook of putting the idea of the cancer centre into practice was at this point – rational or not – very interesting to the cancer community, and the planning parties went to work with a “can do” spirit oblivious of the recommendations from across the pond. Could a comprehensive cancer centre finally beat the odds and be on its way?

The Cancer Centre That Never Was

Gallery of key persons in chapter 3

Name:	Institutional affiliation	Representing State/Society	Pro the recommendations of The Kjeldgaard Report	Con the recommendations of The Kjeldgaard Report	Summarised actions in this chapter:
Professor Niels Ole Kjeldgaard (1926-2006)	-Dep. For Molecular Biology, Aarhus University - Member of the NSRC (until 1981) -Member of the Society's Executive Committee (1981-1990)	State: the NSRC From 1981: Also the Society as member of the Executive Committee	X	-	As a NSRC member, he took the initiative for a national cancer survey 1977-79, and published the findings in the so-called Kjeldgaard Report, and uses them to reorganise the cancer research field in the wake of the American National Cancer Act of 1971 re-actualising the formal institutions created by Hartvig Frisch in 1949. As a member of the Executive Committee of the Cancer Society, he helped bring about a budget reform based on the findings of his Kjeldgaard Report: that the best research projects were peer reviewed and funded through grants-in-aid. At the Society's research institutes, the heads of research decided which projects to fund through the institute's core budget. The new budget reform changed this, and forced all intramural researchers to apply for funds on equal footing with extramural researchers through the Society's Scientific Council. This reform deprived the research heads (such as Jørgen Kieler) of a lot of power over the research profile of their institutes. As a member of the Society's Executive Committee, Kjeldgaard thus used a NSRC initiative to help change the power balance at a private society.
Prof. S.O. Andersen	-Dep. For Zoo-physiology, Copenhagen University - Member of NSRC (until 1983) - author of Kjeldgaard Report	State/NSRC	X	-	Not explicit in this chapter
Prof. MD, Hans Klenow	-Biochemistry Department B, Copenhagen University -NSRC member	State/NSRC	X	-	Like Kjeldgaard, Klenow supported basic cancer research. According to Klenow, Jørgen Kieler had previously dismissed Klenow's work on DNA synthesis as insufficiently focused the cancer problem, when they both worked on the Fibiger Institute – thus making a science policy statement about the scientific profile at the institute. Klenow later took on a university professorship, but as author of the Kjeldgaard Report, which

The Cancer Centre That Never Was

	(before 1981) -Author of Kjeldgaard Report				stressed the importance of basic biological research in cancer research, Klenow pushed for increased support for basic cancer research and a more democratic mode of organisation at the Society's research units.
MD Nis I. Nissen	-The Finsen Institute -Author of Kjeldgaard Report (appointed by the NSRC)	State/NSRC	X	-	Not explicit in this chapter
MD Ove Sten- Knudsen	-Biophysical Department, Copenhagen University. - NSRC member (before 1981) -Author of Kjeldgaard Report	State/NSRC	X	-	See, Niels Ole Kjeldgaard.
Professor MD Viggo Faber	-The Epidemiology Department M, Rigshospitalet) - MRC member (until 1982) -Author of Kjeldgaard Report	State/MRC	X	-	Not explicit.
Professor Jens Rehfeld	-The Clinical- Chemistry Dep. CL, Rigshospitalet. -MRC member (until 1983) -Author of	State/MRC	X	-	Not explicit in this chapter

The Cancer Centre That Never Was

	Kjeldgaard Report				
MD Mogens Andreassen	-Chairman of the Cancer Society (until 1981) - Author of Kjeldgaard Report	The Cancer Society	X	-	As chairman of the Danish Cancer Society, Andreassen used the report to pressure the public authorities (such as the Ministry of Education) to increase its funds for cancer research. Also, if the Report's recommendation of a comprehensive cancer centre was carried through, the Society would be able to hand over its research departments to the State/University, which was one of the Society's (and thereby Andreassen's) aims.
MD C. Crone	- Rigshospitalet - Author of Kjeldgaard Report	Appointed by Carlsberg Foundation			Not explicit.
MD Keld Danø	-The Laboratory of Tumour Biology, Rigshospitalet - Assistant to the authors of the Kjeldgaard Report	-	-	-	Not explicit in this chapter
MSc Jesper Zeuthen	- Assistant to the authors of the Kjeldgaard Report	-	-	-	Not explicit in this chapter
Seymor S. Cohen	American virologist, wrote about cancer centres	-	-	-	-
Jerome M. Vaeth	American radiotherapist, wrote about cancer centres	-	-	-	-
Peter Ilbery	Australian	-	-	-	-

The Cancer Centre That Never Was

	radiobiologist, wrote about cancer centres				
Inge Henningsen	Statistician from the Department for Mathematical Statistics, Copenhagen University.	State/Copenhagen University	-	X	As a statistician, she wrote an article attacking the Report's tendency to accentuate human and economic benefits of supporting cancer research. She claimed that there was no statistical basis for many of the report's conclusions and recommendations.
Professor MD Steen Olsen	-Chairman of the Cancer Society (1981-1989) - Pathologist from Aarhus University.	The Cancer Society	X	-	As new chairman of the Cancer Society, he promoted the findings of the Kjeldgaard Report, in the hope that it would increase the support for the anti-cancer cause in general. Also, he and his Society used the report to carry through a Budget Reform within the Cancer Society, <i>See Niels Ole Kjeldgaard</i> .
Jørgen Kieler	Director of the Fibiger Institute	The Cancer Society	(x)	X	Kieler was opposed to the Kjeldgaard Report's emphasis on basic biological disciplines in cancer research and its views on science organisation. He was also unsatisfied with the way the report portrayed the quality of the work done at his Fibiger Institute (as low-ranging). He appealed to the management of the Society by arguing that the Report's finding was based on faulty or insufficient bibliographical studies. He was also against the Budget Reform – which was initiated because of this finding – and which deprived him of a great deal of decision making power, see Niels Ole Kjeldgaard. But although Kieler did not like the Report's emphasis on molecular biology in cancer research and its views on research organisation, he did agree with the Report's idea to establish a comprehensive cancer centre. cancer centre.
Dr.Kay Ulrich	Head of department of Fibiger Institute	The Cancer Society	(x)	X	Like Jørgen Kieler above.
Mr. Mygind	Director of the Cancer Society until 1981	The Cancer Society	-	-	-
Ole Bang	-Economist -Director of the Cancer Society 1981-94	The Danish Cancer Society	X	-	As a banker/economist used to operating private businesses, he introduced new and progressive administrative and fundraising ideas into the old-fashioned cancer charity. He wanted to transform the organisation into a modern corporation/business, and on this point he implemented the Kjeldgaard Report's suggestion that it was time to introduce

The Cancer Centre That Never Was

					quality evaluations in the Society's research units and to establish a comprehensive cancer centre, through which the Society could eventually hand over its research units to the State.
Bertel Haarder	Minister of Education	Ministry of Education	-	X	Did not support all of the Report's suggestions, as he did not think it was the Ministry of Education's responsibility to establish a special cancer research fund. In addition, the report showed that the best cancer research was already done at the state-held universities and hospitals so why change this? However, Haarder did support the idea of a comprehensive cancer centre as long as it did not require additional funds.

Chapter 4: The Rockefeller Centre

Path perpetuation

The planning and establishment of a comprehensive cancer centre required a new type of collaboration between different public and private funding bodies and research organisations. A successful outcome of the endeavour was heavily dependent on a delicate power balance between all of the involved parties. But was it really possible to establish and govern a cancer centre in a way that would satisfy the interests and demands of them all, when they did not necessarily share the same political and scientific aims? This chapter will show how the very idea of a cancer centre appealed to researchers, research administrators and politicians for different reasons that were not always in accord with the formal institutions set by government, the recommendations of the Kjeldgaard Report, or the US recommendations for planning a cancer centre. And which in some cases had very little to do with cancer research. There was a lack of a clear cut definition of what type of cancer research program to include in the potential centre. In fact the topic was avoided by the planning group, and this made it very difficult to decide which type of centre to build and which research groups to select for the centre based on its scientific profile. Instead, political and economical agendas of the planners took forefront. And when one of these planners, the Danish Cancer Society, suddenly rocketed towards new wealth and power due to favourable formal institutions and new business inspired leadership, it markedly changed the organisation's interests in a potential cancer centre.

The fate of the small hospital, the Finsen Institute, was decisive for the location of a cancer centre. In 1984, the Ministry of the Interior decided that the hospital would be moved to Rigshospitalet on Blegdamsvej. And this locked in on the location of the proposed cancer centre: the Rockefeller Institute (see appendix E). The multi-unit working group planning for the cancer centre consisted of representatives from Copenhagen University, the MRC, the NSRC, the Danish Cancer Society, Rigshospitalet and the Finsen Institute (which had been under the aegis of Rigshospitalet since 1980).

The Cancer Centre That Never Was

Table 4-1 Members of the working group:

Name	Scientific Institution	Representing
Budget and Planning Director J. Rastrup Andersen	The Budget and Planning Department of Copenhagen University	Copenhagen University
Professor Svend Olav Andersen	Department for Biological Chemistry A, Copenhagen University	The NSRC (member until 1985)
Director Ole Bang	The Danish Cancer Society	The Danish Cancer Society
Associate professor, MD, Elisabeth Bock	The Protein Laboratory, the Medical Faculty, Copenhagen University.	The Medical Faculty, Copenhagen University.
Professor Niels Ole Kjeldgaard	- Department for Molecular Biology, Aarhus University - Member of the Society's Executive Committee	The Danish Cancer Society
Major consultant, MD, Nis I. Nissen	The Medical Department, the Finsen Institute	The MRC (1983-1987)
Major consultant, MD, professor Steen Olsen	- Department for Pathological Anatomy, Aarhus Municipal Hospital - Chairman of the Danish Cancer Society	The Danish Cancer Society
Professor MD Jens F. Rehfeld	- The Clinical-Chemical Department, Rigshospitalet - MRC member (until 1983)	The Medical Board of Rigshospitalet
Major Consultant, MD, Mikael Rørth	- The Oncology Department, the Finsen Institute	The Medical Board of the Finsen Institute
Professor, MD, Morten Simonsen	- Department for Experimental Immunology, Copenhagen University - Member of the MRC (1982-1986)	The MRC (chairman of the subcommittee)
Associate Professor, MD, Eva Steiness	Head of the Medical Faculty, Copenhagen University	The Medical Faculty Board, Copenhagen University
Head Clerk Ulla Thorsteinsson	Ministry of the Interior	Observer from the Ministry of the Interior
Head Clerk Lone Østergaard	Ministry of Education	Observer from the Ministry of Education
Head Clerk Bente Møller	The State's Research Secretariat	Secretary for the Secretariat of the MRC

Representatives of the MRC, the NSRC, the Danish Cancer Society, Rigshospitalet and the Finsen Institute found it very important to establish the research labs in close connection with the clinic; also, the Cancer Society and the Finsen Institute wanted their research units to be kept together. Representatives from Copenhagen University were, however, of a different opinion. They were not satisfied with the decision to place a cancer centre in the Rockefeller complex

The Cancer Centre That Never Was

because it severely interrupted the carefully planned structure of the Medical Faculty⁴²². In order to make room for the centre, many of the Faculty's departments would have to be moved to another location, much to the dismay of the staff and students. As the planned comprehensive cancer centre was already facing space problems, the University representatives Eva Steiness (Dean of the Medical Faculty) and university basic cancer researcher Elisabeth Bock wanted to restrict the number of research units that were allowed to move into the potential centre. In a presentation to the rest of the group, the two estimated that the most interesting candidates (in terms of research programs) would mainly come from the Medical Faculty, the Finsen Institute, the Fibiger Institute⁴²³, and the Danish Cancer Registry⁴²⁴. However, the latter was only to be included if there was enough room⁴²⁵.

As will be elaborated on, there was no thorough discussion of which groups were considered interesting and why – which was after deciding on a research program was step two of the recommendations from the Washington conference on planning for cancer centres – but the University representatives' estimation seemed to comply with a wish of disturbing the structure of the Medical Faculty as little as possible. In other words, the University representatives did not want to keep the Fibiger Institute, the Finsen Institute and the Danish Cancer Registry together at all costs, especially not if it meant that yet another of the Faculty's own departments had to be moved.

Because the biomedical field at the University was very broad in scope and undertook research based education, it had been very difficult for the Faculty to pinpoint and separate the cancer related groups from the rest of the field, because these groups were all integrated in the Faculty's other activities⁴²⁶. The two representatives thus advocated that as many of the basic biomedical disciplines as possible should be allowed to stay in the Rockefeller complex on Blegdamsvej and Juliane Maries Vej, see appendix E. In essence, the objective of the University was not to decide on a meaningful cancer research program for the centre but to maintain the

⁴²² Letter from the Head of Copenhagen University to the Ministry of Education, September 5th 1983, *Personal Papers of Ole Bang*, (Copenhagen), p.1-2.

⁴²³ The two University representatives included the Fibiger Institute despite the poor rating it was given by the Kjeldgaard Report.

⁴²⁴ It seems that Bock and Steiness would only approve of a cancer centre in the Rockefeller building if it contributed to or fitted the activities of the Medical Faculty or at least disturbed them as little as possible.

⁴²⁵ Letter from Eva Steiness and Elisabeth Bock, March 12th 1984, *Personal Papers of Ole Bang*, (Copenhagen), p. 7.

⁴²⁶ Report from the MRC-working group: *Redegørelse til Undervisningsministeriet vedrørende en samordning af den basale onkologiske forskning i hovedstadsområdet*, Oktober 1984, *Personal Papers of Ole Bang*, (Copenhagen), p. 14.

The Cancer Centre That Never Was

existing structure of the Medical Faculty to the widest extent possible. That is, to make sure that a potential cancer centre did not impair the housing and funding set-up for the medical faculty.

In addition, the University representatives found no need for placing two new *research professors* in the centre, as the MRC had planned to do⁴²⁷. These extraordinary professorships were co-financed by the MRC, the Danish Cancer Society, and the pharmaceutical company Novo Nordisk A/S that was known for its products for diabetic care⁴²⁸. The positions were created in 1982 as an attempt to follow the recommendations of the Kjeldgaard Report. By offering promising young cancer researchers relatively lucrative 5-year research positions, the MRC hoped to persuade them not to go abroad and be forever lost for Danish cancer research⁴²⁹. The first two research professors of the kind were basic cancer researchers Dr Lennart Olsson and Dr Lars-Inge Larsson, who at the time were placed at Rigshospitalet and at the University Department for Pathological Anatomy, respectively⁴³⁰. The two University representatives argued that:

It is not obvious that room should be made for these two professors, as they are already placed in relatively close geographical proximity to the Rockefeller complex, and one of them has been appointed professor in Aarhus.⁴³¹

Besides being against housing the two research professors in a comprehensive cancer centre that was – in their opinion – already pressed for space on the drawing board, the two University representatives disliked the fact that a move would make the MRC a research organ running its own research units⁴³². This was not part of the Council's terms of reference. In summation, the objection from one of the participating organisations (the University) shows that there was no upfront consensus in the working group on the matter of what the planned centre should include in terms of a common research program and research groups, and on who should finance and run the centre.

⁴²⁷ Ibid.

⁴²⁸ The reason why a pharmaceutical company traditionally concerned with diabetes would support biotech/cancer studies could be that the broad cell biological approach could potentially reveal important knowledge on the molecular mechanisms of diabetes as well. Or it could be an attempt to branch out into the cancer field, which due to the molecular bandwagon was offering hope of new areas for drug development.

⁴²⁹ The Chairman's report to the Head Board of the Danish Cancer Society, April 30th 1984, *Personal Papers of Ole Bang, (Copenhagen)*, p. 4.

⁴³⁰ Professor Lennart Olsson was primarily financed by the MRC and NOVO, while Larsson primarily received his funds from the MRC and the Danish Cancer Society.

⁴³¹ Letter from Eva Steiness and Elisabeth Bock, March 12th 1984, *Personal Papers of Ole Bang, (Copenhagen)*, p.

7.

⁴³² Ibid.

The Cancer Centre That Never Was

Consensus was not required to continue the planning, though, and after lengthy discussions, the University representatives' stand was outvoted by the other parties who felt that it was uncompromising and therefore incompatible with an actual realisation of the cancer centre plans. Concerns for the existing structures of the Medical Faculty were not considered as important as "unifying" cancer research in a comprehensive centre which, if built, would provide the physical frames and the professional legitimacy to cancer research as a scientific discipline on a par with the existing disciplines at the Medical Faculty.

But would it be able to unite practitioners of the umbrella-like activity of "cancer research" on a scientific level through joint research programs? Potential residents of the comprehensive cancer centre were listed by the working group without reference to a common research program or discussion thereof, even though the list entailed very diverse and not directly convergent aspects of the umbrella-like concept of cancer research. As mentioned in chapter 3, a Washington conference on planning for cancer centres recommended that identifying a common and unifying research program was the important first step of the planning process and the rational basis for deciding on a centre's potential research groups, its director/managerial set-up, and finally its location. Clearly, the Danish planning group adopted another approach than that emulated from the experiences with the US cancer centre program.

The compiled list of potential inhabitants for the Danish centre was as follows in table 4-2:

The Cancer Centre That Never Was

Table 4-2 List of potential research groups/institutes for the Rockefeller Centre

Name:	Home Institution:	Research area	Current net size of lab in m2:
The Department of Pharmacology	The Medical Faculty, Copenhagen University (CU)	Basic toxicology	unknown
The Department of Medical Microbiology	The Medical Faculty, CU.	Research and education in medical microbiology (cell biology, tumour virology, tumour immunology)	-
The Department of Experimental Immunology	The Medical Faculty, CU.	See above	-
The Protein Laboratory	The Medical Faculty, CU.	See above	-
The Department of Microbiology	The Institute of Odontology,	Oral microbiology	-
The Immunological Research Unit	The Faculty of Science, CU.	Cancer immunology	-
The Fibiger Institute	The Danish Cancer Society	1) Chemical carcinogenesis 2) Molecular Oncology 3) Tumour Endocrinology 4) Tumour Virology	1725 m2 (7 SP 8 students ~ 34 TAP 6 guests)
The Finsen Institute	Rigshospitalet	1) Biochemical mechanisms of cancer invasion 2) Cytogenetic studies of malign neoplasms 3) Experimental studies of resistance to chemotherapeutic agents 4) Production of monoclonal antibodies	1123 m2 (10 SP 9 students ~ 20 TAP)
The Danish Cancer Registry	The Danish Cancer Society	Epidemiology and registration of cancer incidences: 1) Cancer & occupation 2) Cancer risk & environment 3) Screening for cancer	805 m2 (23 staff members)
Research Professor Lennart Olsson	The Rigshospital, (Juliane Mariesvej 36) Financed by MRC + NOVO	1) The genetics of malignancy 2) Intratumour phenotypical variation 3) Cell lines from lung cancer and Hodgkin's disease 4) Monoclonal antibodies for early diagnosis of lung cancer 5) Tissue-receptor interaction 6) Technical production of monoclonal antibodies	150 m2 (1 SP, 10 students/assistants, 6 TAP)
Research Professor Lars-Inge Larsson	Copenhagen University Financed by MRC + The Danish Cancer Society	Immunocytochemical studies of peptide hormones and polyamines in cancer tissue	105 m2 (13 staff members)

Source: Report from the MRC-working group: "Redegørelse til Undervisningsministeriet vedrørende en samordning af den basale onkologiske forskning i hovedstadsområdet", October 1984.

The Cancer Centre That Never Was

Deciding which groups were to move into the centre was far from the only problem the working group had to address. The issue that courted the most controversy in the group was the question of the structure and *management* of the centre. What mode of management should be employed in a centre consisting of an array of independent private and public research units with different political administrations, managerial setups, and different objectives (patient treatment vs. basic laboratory research; public vs. private need for PR)? A letter from the MRC chairman to the working group exemplifies concerns in the cancer community over these issues, as the MRC strongly believed that a coordination of the cancer research field would not happen just by moving the units under the same roof,⁴³³ and it thus argued that there was a pressing need to establish a joint administration for the activities of the centre. But which mode of administration should it be?

The self-owning but state-financed universities were governed by the statutes of the Danish University Act of 1970. This Act reduced professorial power and undermined the traditional hierarchical structure at the universities by allowing students and technical/administrative staff to have a say in the decision-making process. Given that a department head was elected by his entire staff and not only by an elitist faculty, this mode of management was very democratic. Things were quite different at the publicly owned hospitals, though. Here the hierarchical structure, in which chief physicians and surgeons were on top, was still maintained. When Rigshospitalet took over the Finsen Institute in 1980, this private institute naturally fell under the structure and management of the larger state-owned Rigshospitalet. Generally speaking, the University and Rigshospitalet represented different takes on research administration and ownership even though these organisations had historically been intertwined through research, professorial positions and educational programs.

In addition to this, the fate of the Cancer Society's privately owned Fibiger Institute and the Danish Cancer Registry was not yet clear. The Danish Cancer Society wanted to fulfil its spearhead ambition by turning over the reins of the two research units to the State (as part of either Rigshospitalet or Copenhagen University) while investing its resources in research instead of physical buildings. Such a transaction had been strongly endorsed by the Kjeldgaard Report, and plans were made for the State to takeover the Danish Cancer Registry in the early 1980s. However, according to the Society's chairman, Steen Olsen, the public authorities (the Ministry

⁴³³ Letter from Chairman Poul Kildeberg (MRC) to the cancer centre working group, May 24th 1984. *Personal Papers of Ole Bang (Copenhagen)*, p. 2.

of Education) were too reluctant to acknowledge the full extent of their responsibility for this indispensable registry, and so the Society was forced to continue financing the majority of the Registry's activities⁴³⁴. Nonetheless, the plans for a cancer centre put an administrative transfer of the Fibiger Institute and the Danish Cancer Registry right back on the agenda. For in which context should these institutions be placed? That of Copenhagen University? Of Rigshospitalet? The answer to this question was crucial to the structure of the contemplated comprehensive cancer centre, as its administration would have to be flexible enough to accommodate a gradual ownership change of two of the research units to be included in the centre.

In September 1984, the working group concluded its work and submitted a report to the MRC, the Ministry of the Interior, and the Ministry of Education⁴³⁵. The views of the group were so divergent on important issues that it had become necessary to outline both a majority and a minority proposal for a comprehensive cancer centre, its management, and its structure.

In a path dependence perspective, it is important to note this decision. Consensus was never reached on crucial issues of the plans to establish a cancer centre. In fact, two different proposals were submitted to the political authorities/ministries that were about to decide the fate of the centre plans in times of minimal state research support, recession and such formal constraints acting against the centre being established at all. Still, the working group did not find it necessary to advise the political authorities not to support the centre plans although the group's discussions, the split proposals, and a letter from the chairman of the MRC had revealed real concern about the feasibility of a joint centre. So even though there may have been good reason for the working group (representing the cancer community) to push for a cancer centre in spite of this – e.g. the group may have hoped that the centre would in time source in additional state or private funding and professional recognition to the cancer field – a joint cancer centre was promoted to the politicians in the face of obvious obstacles and alternatives. And according to Douglass C. North, this is an indicator that path dependence may be at large.

4.1 The two models

The working group agreed that a "cancer centre" at the Rockefeller complex would be the ideal tool to create the kind of fruitful research milieus the Kjeldgaard Report had called for in 1981, and that the staff of this centre should consist of a balanced mix of experienced older researchers

⁴³⁴ Olsen, S. (1982) "Er indsatsen i kræftforskningen tilstrækkelig?" *Politiken* København 15.02.1982.

⁴³⁵ Annual report of the Chairman of the Danish Cancer Society (1985), *Personal Papers of Ole Bang, (Copenhagen)*, p. 5.

The Cancer Centre That Never Was

in tenure and younger ones in short time positions⁴³⁶. This would supposedly make the centre's research program dynamic and flexible enough to take on new research projects and/or terminate others over a short period of time. While it was clear to all the members of the working group that the purpose of the cancer centre was to coordinate the research efforts of the cancer researchers in Copenhagen, their concluding report lacks reflection on whether or not they hoped a synergy-effect of placing these groups under the same roof would emerge by itself, or if a more formal coordination and management strategy was needed.

The group was interested in establishing the kind of organisational framework that would best support collaboration in the centre, but it is not entirely clear whether the sort of collaboration referred to was cross-disciplinary scientific teamwork between the new inhabitants of the centre, or if it was simply the financial partnership of the public and private funding organs that made the centre possible in the first place, because a common research program was never discussed. The members of the working group also held very different views on what a "fitting organisational framework" in fact was. In their report to the MRC, the Ministry of the Interior and the Ministry of Education, the members thus presented *two models* for different types of cancer centres.

The majority model. The majority of the working group backed a model that was very similar to the comprehensive cancer centres proposed by the Kjeldgaard Report of 1981, and Engelbreth-Holm's vision from 1945⁴³⁷. It combined basic, clinical, and epidemiological cancer research with cancer treatment and education. The idea was to move the Fibiger Institute, the Danish Cancer Registry and the Finsen Institute into the Rockefeller complex in close connection with the cancer relevant University research groups and the clinical oncology departments at Rigshospitalet⁴³⁸. The University would provide the physical settings for the centre in the form of the 4.200 m² large Rockefeller complex which could house an estimated 10-20 research

⁴³⁶ Report from the MRC-working group: "*Redegørelse til Undervisningsministeriet vedrørende en samordning af den basale onkologiske forskning i hovedstadsområdet*", October 1984, *Personal Papers of Ole Bang*, (Copenhagen), p. 25.

⁴³⁷ The model was backed by Ole Bang, Steen Olsen, and Niels Ole Kjeldgaard representing the Danish Cancer Society. Also, it received backing from Eva Steiness and Elisabeth Bock of the Medical Faculty; as well as from Nis I. Nissen (Rigshospitalet and the MRC) and Mikael Rørth (The Finsen Institute), and finally from the Head of the University's Budget and Planning Division, J. Rastrup Andersen.

See the report from the MRC-working group: "*Redegørelse til Undervisningsministeriet vedrørende en samordning af den basale onkologiske forskning i hovedstadsområdet*", October 1984, *Personal Papers of Ole Bang*, (Copenhagen), p. 24.

⁴³⁸ Ibid, p. 26.

The Cancer Centre That Never Was

groups or 50 researchers with additional technical and administrative personnel⁴³⁹. According to the Report these researchers – and those from Rigshospitalet and the University who were already situated in or near the complex – would make the centre large enough to have the critical mass necessary for a cross-disciplinary and cross-organisational attack on cancer. But although there would be room for visiting fellows and the two research professors who would frequent the premises for short periods only there was no financial latitude for a separate department for them.

The model included a possible organisational mode for the centre as well. At the specific request of the Danish Cancer Society, the management of the centre was designed with special consideration for the fact that the Society still carried the full financial burden of the Fibiger Institute and the Danish Cancer Registry⁴⁴⁰. The working group members, who backed this model, all agreed that the two private research units would ideally be placed under the auspices of the State:

The majority adopts the perception of the Danish Cancer Society that the financial responsibility for the Fibiger Institute and the Danish Cancer Registry should be transferred to the State in the long term. A majority (Steen Olsen, N. O. Kjeldgaard, Eva Steiness, Elisabeth Bock, J. Rastrup Andersen and Ole Bang) finds that a transfer of these institutes to the Medical Faculty of Copenhagen University would be natural, while a minority (Mikael Rørth and Nis Nissen) finds that a transfer to Rigshospitalet would be the best solution. We recommend that the funds now earmarked for the operation of these institutes be put into the fund pool distributed to public and private cancer researchers through peer review and quality assessment by the Society's Scientific Council. The majority finds that the collaboration and management structure should be adjusted when a transfer to Copenhagen University/ Rigshospitalet has been completed.⁴⁴¹

A model of management was created to accommodate the present and future ownership of the two private research units. From an early onset, the Danish Cancer Society had proposed the establishment of a so-called administrative “Supervisory Board”, consisting of representatives from each funding body (the Society, the MRC, the University, and Rigshospitalet) as well as a scientific “Coordination Council” consisting of representatives from each research unit in the comprehensive cancer centre⁴⁴².

The purpose of the Supervisory Board was to ensure administrative coordination of the scientific activities in the centre, and to obtain the necessary resources shared by all of the otherwise

⁴³⁹ Ibid, p.27.

⁴⁴⁰ Ibid, p. 28.

⁴⁴¹ Ibid, p. 30.

⁴⁴² Note from the Danish Cancer Society to the working group. “Note on the management of a coordinated oncological cancer research complex”, May 28th 1984, *Personal Papers of Ole Bang, (Copenhagen)*.

The Cancer Centre That Never Was

administratively independent research units – that is – resources for animal stables, libraries, repair workshops, canteens etc. The Board would be responsible for a fair spreading of shared expenditures as well. The individual funding organs represented in the Board would still hold full responsibility for appointment of staff, project funding, and basic funding of the operation of their respective research units⁴⁴³. In this way, the comprehensive cancer centre could be established for a minimum of additional funds, as its research groups would be financed by the same means as always. The financing plan was thus in accord with the strict “no-growth” financial policy for public expenditures set by the government that backed the centre only on the condition that it would be established and run without additional funds. The “State” – here meaning the Ministry of the Interior and the Ministry of Education – would only have to finance the modernisation and technical equipment of the buildings⁴⁴⁴, and in the long run, the cost-effectiveness of rational large-scale operation of the centre (such as shared equipment etc) was believed to save money for the funding bodies compared to the current arrangements. At least this was one of the Report’s arguments to promote the centre plans, as it played into the formal institutions set by the government with its focus on rational planning.

In contrast to the Supervisory Board, the Coordination Council would be responsible for facilitating an actual collaboration between the different research groups in the centre. It was the Council’s job to find out if the research programs of the different groups complemented each other. The working group did not, however, give any instruction as to what to do if this was not the case. Perhaps the group felt that scientific coordination was a straightforward process that needed no further elaboration in the Report. In any case, the management model proposed by the Cancer Society focused on form rather than content. As mentioned in chapter 3, the Washington conference on planning for cancer centres suggested a “content first, form later” approach, inasmuch as the research program would be a rational basis from which to identify the centre’s research groups, and lastly to choose who and how to run and finance the centre. Nevertheless, the Society’s model was readily adopted by the majority of the working group, and the private cancer charity thus succeeded in leaving its mark on the proposed comprehensive cancer centre from the start.

⁴⁴³ Report from the MRC working group: “Redegørelse til Undervisningsministeriet vedrørende en samordning af den basale onkologiske forskning i hovedstadsområdet”, October 1984, *Personal Papers of Ole Bang*, (Copenhagen), p. 29.

⁴⁴⁴ Ibid, p. 30.

The Cancer Centre That Never Was

The minority model. The minority of the working group proposed an entirely different type of centre, although it too was to be located in the Rockefeller complex (form). Instead of a categorical cancer centre that would have cancer research as its only objective, three⁴⁴⁵ group members wanted to establish a centre for cell biology and basic cancer research (content). To them, cancer research was a sub-field deeply embedded in the basic cell biology research discipline, and this was reflected in the research program they presented. Their proposed centre thus emphasised fundamental research rather than applied⁴⁴⁶. In other words, the centre anticipated by these representatives assigned a low priority to bridging the gap between bench and bedside, and the plans for the centre thus only included non-clinical units: the Fibiger Institute, the Danish Cancer Registry, the two research professors Olsson and Larsson, the Finsen Lab, and a few departments from the University.

The centre would have to be established gradually as not all of the 5682m² needed were available right away⁴⁴⁷. Professors Olsson and Larsson, the Finsen Laboratory and the University's Protein Lab were to move in immediately, while the rest of the research units (from the Danish Cancer Society and the University) would have to wait. Much like the model proposed by the majority of the working group, this centre model did not deal specifically with how to ensure collaboration between the new "tenants" of the centre:

Both the Fibiger Institute and the Danish Cancer Registry are, until further notice, owned and run by the Danish Cancer Society. Shared management and administration for the entire Centre for Cell Biology and Basic Cancer Research is not likely from the start. A fruitful scientific inter-relationship can nevertheless be expected through a physical coordination in the same building. This is true for the smaller and predominantly immunological research units at Copenhagen University which, from the viewpoint of science, ought to be placed in the Rockefeller complex alongside the new centre, even though they would remain university departments on the administrative level.⁴⁴⁸

In contrast to the model proposed by the majority, this basic research centre assigned much more space and influence to the research professors – and to Lennart Olsson in particular – even though they did not have security of tenure in their short 5-year contracts. The logical basis for this unusual arrangement can be found in the untraditional ways in which the centre was

⁴⁴⁵ Copenhagen University biochemistry professor and NSRC member Svend Olav Andersen, Rigshospital clinical chemistry professor and former MRC member Jens Rehfeld, and the Copenhagen University experimental immunology professor and MRC member Morten Simonsen.

⁴⁴⁶ Report from the MRC working group: "*Redegørelse til Undervisningsministeriet vedrørende en samordning af den basale onkologiske forskning i hovedstadsområdet*", October 1984, *Personal Papers of Ole Bang, (Copenhagen)*, p. 31.

⁴⁴⁷ Ibid, p. 32.

⁴⁴⁸ Ibid, p. 33.

supposed to be financed. A financial strategy that could be seen as an attempt to create better conditions for scientific centres in times of the government's no-growth policy. In fact, the minority group may have seen their model as the only way to create a strong and impactful centre under the existing institutional matrix (the government's financial strategy) by playing into this matrix and existing political priority of *biotechnology*, as will be evident in the following.

4.2 Playing into the matrix

In 1984, the Danish government sent out a report on political initiatives to strengthen research and development in Denmark. The report promised an increase in funds for basic and biotech research, through the launching of large cross-ministerial research programs⁴⁴⁹. The enterprise was to be financed by a newly established Danish National Research Foundation, and the minority of the working group saw this new initiative as a possibility for realising the new centre. In addition to the usual funding channels, the new basic cell biology centre was therefore planned to be financed in three rather unusual ways. First and foremost, the three representatives wanted a cut of the new State funding for long-term biotechnology research programs which fitted their plans for a basic cell-biological centre well⁴⁵⁰. Secondly, the representatives hoped to forge a better link between biomedical research and Danish industry. While few Danish pharmaceutical companies (such as Novo Nordisk A/S) had supported cancer research, the pharmaceutical industry was generally more interested in broader cell biology programs and could better be persuaded to contribute financial assistance to the minority's centre than the cancer centre proposed by the majority of the working group. Thirdly, and perhaps most surprisingly, the three representatives suggested that their new centre could be operated in part through the profits of *patenting*:

This possibility is new in Denmark but not in the rest of the Western World. It includes revenues from the industrial application of discoveries and inventions done in research. Such revenues can come from selling patent rights and licences. Under Danish patent law, any scientific personnel at the universities and other institutes of higher education hold the rights of their own inventions unless otherwise provided by law or agreement. The MRC and the NSRC have not yet made their allocations subject to a proviso to limit this right. For this reason, a written pledge from one of the research council's research professors [Lennart Olsson] to involve the MRC in expected revenues from the sale of patent and

⁴⁴⁹ For more on all of the government's political initiatives, see: Regeringens forskningspolitiske redegørelse af 10. maj 1984.

⁴⁵⁰ Report from the MRC-working group: "*Redegørelse til Undervisningsministeriet vedrørende en samordning af den basale onkologiske forskning i hovedstadsområdet*", October 1984, *Personal Papers of Ole Bang*, (Copenhagen), p. 38.

The Cancer Centre That Never Was

licensing rights of his discovery in relation to early cancer diagnostics is even more important, as the patent is expected to result in massive revenues.⁴⁵¹

The MRC intended to use the expected income from the patents to finance the continued operation of the Centre for Cell Biology and Basic Cancer Research. A self-financing centre that was independent of shifting State funding practices and such formal constraints. Of course it was dependent on the centre's researchers taking out commercial patents and sharing the profits with the MRC like Olsson had pledged to do. Lennart Olsson and his research, which will be described further in the below, was therefore of paramount importance to the centre and he became a "favourite son"⁴⁵² of the MRC.

The Danish press portrayed Lennart Olsson as the new international superstar of cancer research when he returned to Denmark from a successful stay at Stanford University as a research fellow in the early 1980s. The journalists were impressed by the young cancer researcher. Olsson was born in 1949 and had managed to win scientific awards ever since his first year as a medical student in Copenhagen, and he became a medical graduate when he was 26 years of age⁴⁵³. In the following years, he became head of a laboratory for cancer biology at Villejeuf in Paris, but from 1979-1981 he worked at Stanford University School of Medicine with Dr Henry Kaplan in his Cancer Biology Research Laboratory. The two worked well together, and their collaboration resulted in the development of a technique to create a special human *hybridoma*, a monoclonal antibody factory that might help diagnose and treat cancer at an early stage of the disease^{454 455}.

⁴⁵¹ Ibid, p. 38.

⁴⁵² Manuscript by Niels Ole Kjeldgaard for a meeting at the DCS January 23rd 1992: "The history of the cancer research centre". *Archives of the Danish Cancer Society, (Copenhagen)*, p. 1.

⁴⁵³ NN (1984). "Lennart Olsson: Danskeren, som amerikanerne investerer millioner i." *Illustreret Videnskab*: 66

⁴⁵⁴ Olsson, L. and H. Kaplan (1980). "Human-human hybridomas producing monoclonal antibodies of predefined antigenic specificity." *Proceedings of the National Academy of Sciences of the United States of America* **77**(9): 5429-5431, p. 5429-5431.

⁴⁵⁵ The human immune system is a sophisticated weapon against many diseases, but according to Olsson, it was inefficient in the battle against cancers. In the early 1980s, Olsson speculated that the reason for this might be that the antibodies produced by the lymphocytes of our immune system were not specific enough. It had been proven that tumours generally consisted of many different cancer cells with different properties, and Olsson thus believed that these different cancer cells displayed a series of specific (protein) characteristics, or antigens, that distinguished them from normal cells (Olsson, L. and H. Kaplan (1980)). A cocktail of antibodies produced specifically for each of these antigens was thus needed to fight the tumour. Such antibodies were called monoclonal antibodies. However, there were technical obstacles in the way of the production of the amount of monoclonal antibodies needed. While normal lymphocytes produced an array of antibodies with different degrees of specificity inside the human body, they did not survive for long in a Petri dish. In 1976, Köhler and Milstein from Cambridge University thus tried to exploit the property of cancer cells (to be able to divide in vitro) with the antibody production of a normal lymphocyte in order to produce a synthetic cell for the mass production of monoclonal antibodies in mice, and the construct was called a hybridoma. In other words, the synthetic construct was a permanent cell line derived from an artificial somatic cell hybrid formed through a fusion between a cultured neoplastic lymphocyte and a normal lymphocyte, and Olsson and Kaplan were the first to produce a version produced from *human* cells. Olsson

The Cancer Centre That Never Was

Olsson and Kaplan, who had made their findings public at a scientific conference in Paris in 1981, had patented the technique for the production of the special hybridomas and hoped that it would lead to better diagnosis and treatment of diseases such as cancers⁴⁵⁶. If the monoclonal antibodies were labelled radioactive and injected into a patient, Kaplan and Olsson hoped that the radioactive trace of the accumulated antibodies would reveal the exact position of tumours. In one article, Olsson informed the journalist that preliminary animal studies indicated that the monoclonal antibodies could be used to treat the tumours as well, although none of this had been sufficiently documented yet, and that we had to await the results of many years of laboratory work in order to know for sure⁴⁵⁷. Despite the lack of certain empirical proof of concept, Olsson stated to the Danish press that he had been offered tenure and an impressive salary at many different American research institutes⁴⁵⁸. According to Olsson, his and Kaplan's patent would be very valuable, if they were right, and he claimed that they had already been approached by several American pharmaceutical companies.

Still, Olsson chose to return to Denmark where the technical and financial conditions for his research were far from as good as in the States⁴⁵⁹. According to Olsson, the decision to return to Denmark was made because he and his wife wanted to give their three children a Danish upbringing, and because he feared that he would quickly be phased out of the American research elite if he could not continue to produce groundbreaking results in the years to come⁴⁶⁰:

There are commercial interests in parts of the American research that I would not like to be working for. And it would require a heavy work load that would not otherwise allow me to have a normal life outside.⁴⁶¹

The Danish press was excited that the prodigy son returned to Denmark, and they portrayed the young researcher as a highly intelligent "Renaissance man", who aside from cancer research excelled in everything from literature to table tennis⁴⁶². To the MRC, Olsson must have been an interesting candidate for a research professorship, which as mentioned above was established to

informed the Danish newspapers that although the hybridoma had not yet been subjected to thorough clinical trials, American pharmaceutical companies were eager to invest faith and money in the project.

Ziebe, H. (1981) "Dansker giver lægevidenskaben et nyt værktøj" Berlingske Tidende København 08.03.1981.

⁴⁵⁶ Ibid..

⁴⁵⁷ Ibid.

⁴⁵⁸ Ibid.

⁴⁵⁹ Andersen, P. N. (1981) "USA har sat en pris på hans hovede" Weekendavisen 28.08.1981.

⁴⁶⁰ Ibid.

Meyerheim, M. (1982) "Dansker i verdensformat" Politiken 07.02.1982.

⁴⁶¹ Ibid.

⁴⁶² Ibid.

Dall, O. (1982) "Kræft er ingen dødsdom" Fyens Stifttidende 27.11.1982.

The Cancer Centre That Never Was

keep promising young researchers from moving abroad on a permanent basis. It seems that the MRC thought the plans for a national cancer centre could help them give Olsson the best possible facilities to work in, although the Danish standard would never compare to that of the US.

It was thus no surprise that the centre proposed by a minority of the MRC working group – two of the three were MRC members – offered quite different facilities for Olsson than the model proposed by the majority of the working group. The three representatives may have thought that this model with its special financing (patenting profits and biotechnology program funds) was more likely to result in a (biotechnology) centre than the model backed by the majority of the working group, which relied on additional funds from the Ministry of Education and the Ministry of the Interior. That is, the minority model played into the existing formal institutions set by government with the “zero growth of public costs”- policy and the inevitable process of prioritising/choosing which areas to support or not.

A biotech-based approach to cancer, an internationally renowned research professor within this field, and a patent financing model must have fitted the government’s plans and policy pretty well, although the clinic-less centre did not match the definition of a comprehensive cancer centre or present a unified front of clinical and basic cancer efforts like the majority model and the Kjeldgaard Report aimed to do. The MRC and the NSRC were to be in charge of the overall management of the proposed centre. A management consisting of representatives from these two research councils, the University, the Cancer Society, Rigshospitalet and the European Molecular Biology Laboratory in Heidelberg (EMBL) was to be established and lead the centre according to statutes written by the two research councils the MRC and the NSRC, who would also appoint the chairman of the joint management⁴⁶³. Rigshospitalet would appoint a leader to take care of the administration of the centre and its scientific activities, and he or she would answer only to the board of directors.

Considering that the three representatives were all members or former members of either the MRC or the NSRC, this distribution of power between the research councils and the hospital is no surprise. Nor was the research council’s insistence on giving its own two research professors – Lennart Olsson and Lars-Inge Larsson – prominent positions in the centre. Although only

⁴⁶³Report from the MRC-working group: “Redegørelse til Undervisningsministeriet vedrørende en samordning af den basale onkologiske forskning i hovedstadsområdet”, October 1984, *Personal Papers of Ole Bang, (Copenhagen)*, p. 35.

The Cancer Centre That Never Was

three out of the eleven members of the group backed the proposed centre for cell biology and basic cancer research, the proposal was included in the report so that the Minister of Education and the Minister of the Interior could decide for themselves when they finally received the report in October 1984.

The two models each reflected different views on the nature of cancer research with respect to their different emphasis on clinical research in the centre. And because of this, the two models represent different takes on – or definitions of – the “cancer centre”. One model excluded the clinic as part of the centre’s grounds of existence (emphasizing basic science only), while the other actively tried to integrate it. The models also differed with respect to management: the minority model was a centre managed in large by the MRC and the NSRC, while the majority model included a poly-institutional direction board with representatives from each institute involved in the establishment of the centre. This latter model of the majority thus tried to unite the differently administered research groups from the hospitals, the University and the Cancer Society – who as mentioned in the above had different takes on cancer research and research administration – and make them function as one in the form of the proposed centre. But would this model function in practice? One man openly doubted this from the very beginning, and even though he was not part of the working group, he got his doubts included in the report to the politicians.

A note from Dr Keld Danø with his view on the centre plans was appended to the report. Danø was a basic cancer researcher (cell migration) and head of the Finsen Laboratory. His status as one of the country’s leading cancer researchers gave him some say in the matter of planning a cancer centre. It was not unlikely that the two Ministers of State would take the opinion of a potential “inhabitant” of the future centre into consideration alongside the official recommendations of the working group’s report. And Danø did not wholeheartedly adopt either of the two proposed models. Like the majority of the working group, he supported a *comprehensive* cancer centre with the main objective of doing cancer research, and he was therefore openly averse to the idea of a broader cell biological research centre⁴⁶⁴:

The purpose of the coordination is partly to reach the critical mass necessary for a fruitful research milieu, and partly to obtain greater flexibility in the use of resources and apparatus. An optimal centre size that would accommodate this purpose can be reached

⁴⁶⁴ Note from Keld Danø to the working group: “Møde 30.05.1984 med arbejdsgruppen vedrørende samordningen af den basale cancerforskning i hovedstadsområdet”, June 1st 1984, *Personal papers of Ole Bang, (Copenhagen)*, p. 2.

The Cancer Centre That Never Was

through a coordination of existing research without an increase in the total funding level. It should be noted that such a centre can in fact be too large, so that it practically stops functioning as a unit. For this reason, a cancer research centre should not try to monopolise cancer research in the Greater Copenhagen area, and it should only include groups with cancer research as their primary objective.

In this connection it should be noted that cancer research is per definition applied research seeking to solve cancer related problems (cf. the Kjeldgaard Report). Any direct incorporation into the cancer centre of special branches of the basic cell biology, which has no direct cancer relevance, does not seem to be scientifically well-founded. Instead, there ought to be a close collaboration between a cancer research centre and the institutes (present and future) that deal with the parts of cell biology, biochemistry and pharmacology relevant to the actual cancer research projects.⁴⁶⁵

He argued that the heart of the centre should be the Fibiger Institute, the Finsen Laboratory, the cancer groups of Copenhagen University, and the Danish Cancer Registry. To Danø, it was crucial that the centre was organised as one department – a single unit – with a common (non-DJØF?) management:

The research management ought to be in the hands of the employed, highly qualified cancer researchers. Any external influence on the direction of the research should take place only in connection with the occupation of tenures and the allocation of project-oriented funds. The administrative management should be performed through one of the institutes with long-time experience in the administration of medical research – that is Rigshospitalet or the Medical Faculty of Copenhagen University. This action will ensure a use of the already present administrative experience, and ensure that management conditions will constantly be adjusted to the experiences of other institutes; it will also ensure that a close relationship to these related institutions/departments is maintained. The establishment of a separate board of directors for the department/institute with responsibility for the everyday operation and consisting of representatives from different authorities – which do not necessarily have the same scientific aim – carries a serious risk of an unclear objective and an unstable management with ensuing inappropriate use of the resources for the department/institute.⁴⁶⁶

So even though Danø agreed with most of the proposal set forth by the majority of the working group, he did not support the proposed Supervisory Board with representatives from all the involved institutes, as he feared that this type of management would prevent the centre from fusing its different parts into one. Nevertheless, he preferred the majority's model over the one proposed by the minority of the working group: a model that would split up the planned "Finsen Institute/ Fibiger Institute/ Danish Cancer Registry"-cluster. As a result, he backed the majority's position on the condition that the three research units were kept together. The management of the Danish Cancer Society, who was actually represented in the working group, took a similar stance on the matter in its annual report to its members:

⁴⁶⁵ Ibid.

⁴⁶⁶ Ibid. p. 4.

The Cancer Centre That Never Was

In 1985, the management of the Society will continue negotiations with the authorities involved, with the implementation of the majority's recommendation in mind, but on the condition that it can be done on acceptable financial terms and that satisfactory physical settings for the activities of the Society's institutes will be provided.⁴⁶⁷

4.3 A cancer centre = Form + X + politics?

As the abovementioned quotes indicate the form, financing, and management of the centre was important to the different planning parties and associated individuals. More so than the definition of a research program. That is, finding a shared and clearly defined objective for all of the potential inhabitants of the centre and letting this objective be the rational basis to identify the research groups from. Instead it would seem that the “inhabitants” would be chosen based on either financing models (patent-strategy), the matter of available space in the centre, or other organisational interests such as not splitting up the Cancer Society's own research units. Such criteria did in no way guarantee cross-disciplinary collaboration between the research groups or guarantee the sudden emergence of a unifying research program. For instance, the research done at the Cancer Registry, the Fibiger Laboratory and the Finsen Laboratory – although all part of the anti-cancer cause – was still so different in nature that collaboration was not a sure thing.

Again the umbrella-like concept of cancer research cloaked internal differences and heterogeneity that worked against the values used to “sell” the centre to the government: “unity” and “collaboration”. Those were concepts that signalled a common war on cancer, a common identity, and a common field worthy of recognition, status, and political priority. Just like the Kjeldgaard Report, the centre plans were the first of the kind in the cancer community and as such they had a symbolic value: a statement of unity to improve the standing of cancer research in the political and scientific/medical fields on a par with the well-established research areas (in the form of academic disciplines and medical specialities at the universities and hospitals) the efforts originated from. Perhaps this is why there are no explicit discussions of a research program in the MRC report as that would have opened a can of worms, so to speak, by revealing a lack of unity. The focus was thus on form and finance instead, and a research program became an as of yet unknown “X” in the equation.

The Society had already exercised some measure of control over the plans, inasmuch as its suggestion for a centre management had been fully adopted by most of the working group. However, the Society reserved the right to await the final financial and structural plans before

⁴⁶⁷ Kræftens-Bekæmpelse (1984). Årsberetning 1984. København, Kræftens Bekæmpelse, p. 15.

The Cancer Centre That Never Was

agreeing to move the Fibiger Institute and the Danish Cancer Registry into the centre. The Society wanted to make sure that the two units would not be separated or given worse facilities than in their present situation. Also, the charity might have been anxious to see whether or not the State would agree to finance the modernisation and fit-up work of the public Rockefeller complex – and thereby change formal constraints – as the report of the working group was suggesting⁴⁶⁸. But while the Society and the other involved parties awaited the response of the Minister of Education and the Minister of the Interior, a group of researchers from the Cancer Registry (Cancer Society), the Fibiger Institute (Cancer Society), and the Finsen Institute speculated on how to coordinate their research efforts in the future centre – which was something that had not been discussed in depth in the report⁴⁶⁹. The difficult topic of content/research program was thus dealt with bilaterally to the official report to the government.

These institutes had a broad spectrum of activities ranging from chemotherapy and radiation therapy to research into tumour immunology, hormones, metastasis and aetiology⁴⁷⁰. Indicating that the oncogene paradigm and the molecular bandwagon of cancer research now had a strong impact on clinicians in the country, researchers from the Finsen Institute's clinical departments argued that the central problem of Danish cancer research was the lack of contact between the clinical and basic aspects of cancer research⁴⁷¹. They argued that clinical cancer research could certainly benefit from the results of basic cancer research and vice versa. While the oncogene paradigm had delivered a new theoretical foundation for the understanding of cancer, the clinic delivered important knowledge about how cancer cells and tumours functioned *in vivo* in contrast to the *in vitro* models of the laboratory, which were often “plastic” tumour cell lines in Petri dishes that no longer represented cancer as it would act and develop in a human body. Also, the clinicians offered important knowledge from clinical trials. So, the clinicians were particularly interested in the new molecular oncology and believed that it would be an advantage for all to try to bridge the gap between clinical and basic cancer research. But how was this to be brought about?

⁴⁶⁸ Report from the MRC-working group: “Redegørelse til Undervisningsministeriet vedrørende en samordning af den basale onkologiske forskning i hovedstadsområdet”, October 1984, *Personal Papers of Ole Bang*, (Copenhagen), p. 30.

⁴⁶⁹ The researchers were: From the Finsen Institute: Keld Danø, Susan Thorpe, K. Hou-Jensen, Nis I. Nissen, J. Bjerregaard, J. Lock-Andersen, Helge Johansen, and Mikael Rørth. From the Cancer Registry: Ole Møller. From the Fibiger Institute: Britta Christensen, Vibeke Tromholt, Svend Ottesen, Jes Forchhammer, Anne Lykkesfeldt, Hanne Jessen and Jørgen Kieler.

⁴⁷⁰ Jørgen Kieler: “Minutes of a meeting held at the Fibiger Institute the 4th of December 1985”, *Personal Papers of Jes Forchhammer*, (Bagsværd), p. 2.

⁴⁷¹ Ibid, p. 3.

The Cancer Centre That Never Was

As mentioned in chapter 2, cancer centres in other countries such as the UK and the US had traditionally been shaped by scientific discoveries (of e.g. x-rays and radium) and the new treatment possibilities that followed from these discoveries. To this group of Danish researchers and clinicians, the latest theoretical breakthrough in the understanding of the biology of cancer likewise made it necessary to place basic scientists and clinicians side by side in a new centre, so that they could continuously exchange data and correct each other's models and eventually produce better treatments. In doing so, the structure of the centre would reflect the historical trend in cancer research. However, the Danish cancer researchers and clinicians seem to have been aware that the differences in the way their activities were administered at their respective institutes could hinder the bridge building. At least, they speculated in administrative changes to make the transfer of the different public and private research units into the centre easier: special positions at the Cancer Society.

So what did this mean? At that time, the Society was rethinking the structure and content of its research tenures, and the researchers therefore discussed whether or not the new tenures should have job descriptions and conditions that would force applicants to cross the traditional borders of clinical and basic cancer research⁴⁷². Or perhaps the Society could even sponsor contracted research in areas in need of cultivation. In this way the three cancer research units would be able to collaborate and coordinate their efforts, and although the fate of the proposed Rockefeller centre had not yet been decided on, public and private researchers had already taken the first steps toward an informal coordination of what the centre was all about – namely cancer research.

In retrospect, the successful establishment of a comprehensive cancer centre in the Rockefeller complex also implied collaboration between different public and private authorities, and as is argued in the previous chapter, it was difficult enough to establish cross-ministerial research programs even without having to involve a cancer charity from the private sector as well. The implementation of the Rockefeller plans thus depended on a delicate power balance between the different funding organs which all had to protect their own interests and investments. The ministries had to be very careful not to engage themselves in costly projects that could possibly be financed by other (private) parties, in a time when the government was trying to reduce the massive national debt established by the former government in the 1970s. Meanwhile, the

⁴⁷² Ibid, p. 4 -5.

The Cancer Centre That Never Was

Danish Cancer Society was a private organisation that had to protect its own financial interests in order to survive and continue to serve the anti-cancer cause.

In the terminology of Douglass C. North, the different entrepreneurs were about to embark in negotiations for a transaction – or a co-operation – on the basis of inadequate information about each other's motives and strategies. It was risky business. In contrast to a standard transaction between trading parties with contracted terms, rights and enforcement, this co-operation was not yet subject to contracts or third party enforcement to prevent defection. And given the economical situation of the time and the fact that the political strategies of the individual funding body seemed to be to commit to financing as little as possible of the proposed centre (either from the start or in the long term), immediate or gradual defection seemed a likely outcome of the negotiations for more than one of the entrepreneurs. Especially since a clearly defined research program was not part of the negotiations and such a viable program would perhaps require coordination efforts demanding a managerial setup that could decrease the influence of some of the planning parties and thus again increase the risk of defection.

The incitement to follow through on the plans, on the other hand, was the Cancer Society getting the state to take over responsibility for research units, and the State establishing a public-private but largely privately funded cancer centre. It was an unwritten mixture of expectations on the short and long term of the cancer centre. It was a balance of trust and power between the funding bodies during their negotiation. A balance that was disturbed, as the income and power of the Danish Cancer Society suddenly increased over few years and made the private charity a major power broker in the cancer community and not just the appendix of the medical community it had traditionally been since its establishment in 1928.

4.4 The growth of the Danish Cancer Society

When Ole Bang was appointed Director for the Danish Cancer Society in 1981, he brought with him a deep acquaintance with the private business and financial sector along with professional management and effective marketing and fundraising strategies that would soon make the Danish Cancer Society the envy of many other Danish charity organisations which had not been accustomed to such fundraising campaigns. Strongly aided by the work of the Cancer Society's PR-department, who used external consultants and bureaus in their work, Bang managed to raise public awareness of the cancer problem and the cancer charity's need for monetary contributions in the war against cancer. And this was quite effective in times when the government was

The Cancer Centre That Never Was

making budget cuts in the health care sector. Choices to cut funds for certain treatments, procedures or patient groups were very unpopular with the Danish public that had come to expect the availability of a high level of quality health care services in the tax-financed health care system.

In 1985-86, a political decision to impair the costly HIV screening of donor blood as a way to reduce costs became a publicly debated scandal as haemophiliac recipients of donor blood were tragically infected with HIV through the procedure⁴⁷³. The case illustrated that a financially rather than medically based prioritising between budget posts in the hospital sector was dangerous to the citizens and politically reckless⁴⁷⁴. In this way, the formal institutions set by governmental policy must have aided the Danish Cancer Society and its cause. To the public, the private charity was doing what the government neglected to do.

Society director Ole Bang introduced new and aggressive fundraising methods that increased the income of the annual national collection and the number of testamentary gifts for the Society. The idea was to spend more money on advertising in order to raise more money; to make the Danish Cancer Society known as an organisation that would be able to make a difference in the war on cancer if the public was willing to help⁴⁷⁵. According to his colleagues, he was the first to introduce lobbyism in a Danish charity organisation, making a point of constantly letting politicians know the nature and extent of the cancer problem, and just how much potential solutions would cost⁴⁷⁶. In this way he managed to secure continuous profits from the State's national lottery. In his own words:

We worked with analysis and marketing methods that at the time were a rare sight in a humanitarian organisation. The risk of mistakes was reduced by continuously analysing and testing new initiatives i.e. through the dialogue with the involved parties: members, lottery punters, ordinary contributors, businesses etc. We did that, for instance, before approaching the members, half of which would later agree to donate an additional biannual contribution; or before 20.000 members agreed to supply a permanent monthly donation to the Danish Cancer Society, or before approaching lottery punters about becoming members or making regular donations to the Society. The income of the lottery was multiplied, the membership was more than doubled to 375.000, and the average member's donation was considerably increased.⁴⁷⁷

⁴⁷³ Jacobsen, K. and K. Larsen (2007). Ve og Velfærd - Læger, sundhed og samfund gennem 200 år. København, Lindhardt og Ringhof, p. 465.

⁴⁷⁴ Ibid.

⁴⁷⁵ Bang, O. (2004). En personlig beretning om Kræftens Bekæmpelse 1981-1994, Narayana Press p. 10.

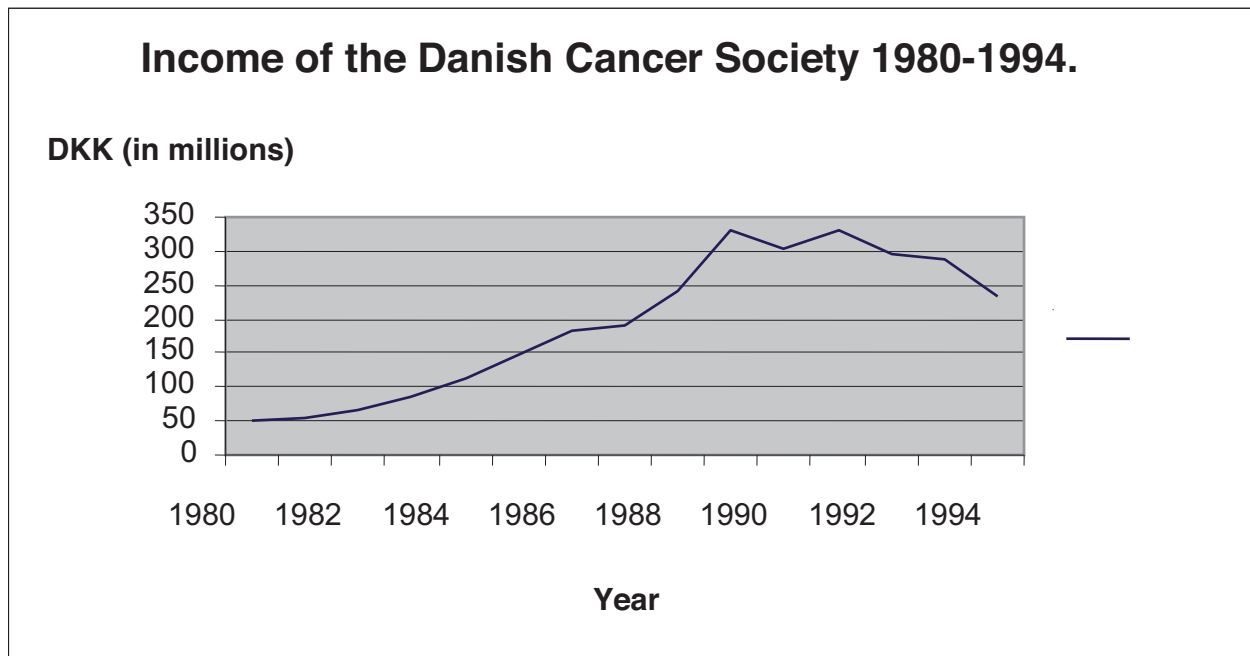
⁴⁷⁶ Interview with Bent Harvald, February 1st 2005.

⁴⁷⁷ Bang, O. (2004). En personlig beretning om Kræftens Bekæmpelse 1981-1994, Narayana Press, p. 11.

The Cancer Centre That Never Was

Ole Bang's management of the Danish Cancer Society became models for other Danish charities, like the Danish Heart Foundation who considered employing similar strategies⁴⁷⁸. This was understandable, given that the Danish Cancer Society increased its income sevenfold from 1980-1989, see figure 4-1.

Figure 4-1:



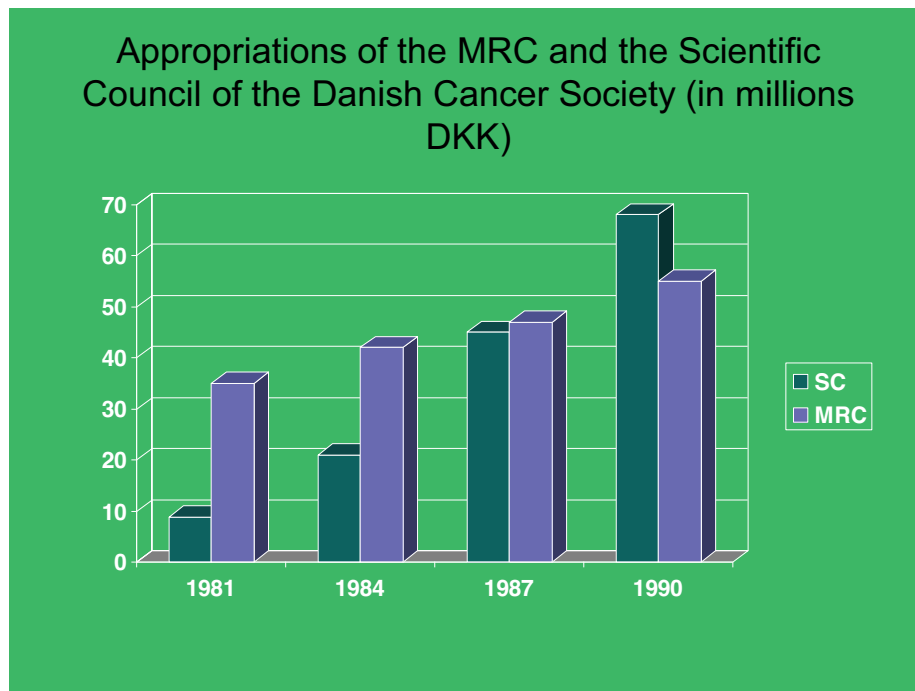
Source: (Kræftens-Bekæmpelse 1980-1994).

Throughout the 1980s this newfound prosperity allowed the Society to fund many more research projects than they used to. The Society's Scientific Council was soon able to allocate more grants for both intramural and extramural cancer research than the State's Medical Research Council, MRC. In fact, the Society's own budgets indicate that at the end of the decade, the Cancer Society's Scientific Council (SC) handed out more funds for cancer research than the State's Medical Research Council (MRC) had available for the entire biomedical field, see figure 4-2⁴⁷⁹.

⁴⁷⁸ Interview with Bent Harvald, February 1st 2005.

⁴⁷⁹ The budgets of the Cancer Society were not uniform from 1980-1994, and it is difficult to specify just how many discretionary funds the Scientific Council had at its disposal every year. Figure 4.2 is therefore for guidance only.

Figure 4-2:



Source: Forskningsrådenes Årsberetninger & Kræftens Bekæmpelses Årsberetninger.

The figure illustrates the increasing wealth of the cancer charity. The Society indisputably became the most important funding organ for Danish cancer research. And with money came influence, so the delicate power balance between public and private funding organs suddenly shifted. Much like a private business, the Cancer Society had to protect its own interests. Its goal was to support the anti-cancer cause by employing its collected funds most sufficiently, but at the same time it could no longer just hand out all of its funds to research and public education, because it had to secure a financial foundation in order to survive and be able to serve the cause for years to come. It needed a strategy to navigate in shifting institutional matrices and market conditions. And for this purpose, the Society's new director acted in the same manner that a private corporation director would: he emphasized rational target attainment, modern marketing and fundraising.

As is evident from the above, he was so successful in turning the old-fashioned cancer charity into a modern business with increasing incomes that the Society could no longer be expected to go along with just about anything the medical researchers wanted it to. It was a force to be reckoned with in times of political pressure on the health care sector. In a Northian perspective, the Society exploited the existing institutional framework set by government and the public's

response to the government's strict financial policy and economically rather than medically based priorities within the hospital sector. The Society used the matrix to optimize its standing, wealth and influence: its symbolic capital. It did so through a mixture of Ole Bang's managerial skills and the public's response to the governmental policy of zero-growth in the public sector which after decades of booming hospital expansion must have felt as actual downsizing and gambling with public health rather than "just" a suspension of growth.

In other words, the strategy of the Danish Cancer Society enjoyed increasing returns in the form of increasing charitable donations from the public and wise investment strategies which gave the organisation a new power position and a new basis for deciding whether or not the proposed Rockefeller centre would in fact serve or impair the cancer charity's new role and objective. The Society had made a shift of strategy that was now paying off and had transformed the organisation from modest charity to a modern, powerful cancer-fighting business. And the two versions of the Society had very different means to promote and reach their objective.

4.5 Path perpetuation in the face of destruction

In August 1985, an article with the title "The State lets civil citizens pay for the fight against cancer" was run in one of the leading Danish newspapers. The article argued that the State did not assume responsibility for finding and financing a solution to the cancer problem, and even though the Cancer Society was experiencing great increases in its income and supposedly paid for more than two thirds of all cancer research projects, it was continuously dependent on voluntary contributions to be able to prevent the country's anti-cancer efforts from collapsing⁴⁸⁰. Both the journalist of the article and the researchers and officials it quoted used the word "State" without always clarifying which agency, council or ministry they were referring to. This made the allegations against the State a bit confusing, as it is unclear to whom they refer. The "State" became an undefined and blurred opponent.

The article brought quotes from Society chairman and Aarhus physician Steen Olsen and the head of management in the State's Research Secretariat, Ib Terp, who agreed that the State – still meaning the State's research councils, the MRC and the NSRC – had gradually downsized its allocations for cancer research, because of the newfound wealth of the private cancer charity, so that they could support other worthy research projects. The article used this information to argue that the State (here meaning the research councils) used the private effort as a pretext for

⁴⁸⁰ Rørth, C. (1985) "Staten lader de private betale kampen mod kræften" Weekendavisen 09.08.1985.

The Cancer Centre That Never Was

doing nothing, although Terp also stated that the research councils had made cancer research a special priority since the publication of the Kjeldgaard Report. But without additional funds from the Ministry of Education, this declaration of intent would be nothing more than an empty gesture. The head of the Danish Cancer Registry, cancer epidemiologist Ole Møller Jensen, was quoted saying that the State did not even contribute to the international WHO cancer centre in Lyon, and that Denmark was thus free-wheeling on the results of other countries' cancer research⁴⁸¹.

In addition, it is interesting that the two quoted MD's claimed that the financial support for clinically orientated cancer research was a public responsibility. The State – here meaning the Public Health Service – had a national responsibility for the quality of *treatment* of cancer at the county-financed hospitals and the State-financed Rigshospitalet, and perhaps the MD's gradually expanded their perception of this responsibility to include support for cancer research as well. If so, they blurred the lines between *health* policy and *research* policy and the support of these. To the average man on the streets, though, the difference must have been non-existent in the first place.

It is equally interesting that the physicians and the author of the article consistently refers to the "State" without specifying which public organ or agency is actually to be held accountable for the lack of cancer research policy and research support. Was it the research councils? The Ministry of Education? The Ministry of the Interior? None of these organs were bound by law to create special policies for individual research areas, or to support them with funds in addition to what was already being channelled through the State Budget to basic budgets of universities and hospitals, and as grants-in-aid from the research councils.

Perhaps this is why the Minister of Education, Bertel Haarder, was quoted in the article for saying that instead of discussing the State's inability to channel more money into Danish cancer research, the Danish people should rejoice in the fact that so many private individuals were willing to work for the cause⁴⁸². In other words, the "State" was not disclaiming its supposed responsibility for the support of cancer research, but the Danish people had simply become more willing to donate money to the cancer charity. This was a somewhat positive spin on things from Haarder whose government was actively trying to reduce the national debt that had been created in an attempt to cover the uncontrollable growth of public expenditures; and to avoid financing

⁴⁸¹ Ibid.

⁴⁸² Ibid.

The Cancer Centre That Never Was

costly projects that could just as well be financed by others such as the wealthy Cancer Society which was after all established with the purpose of financing the anti-cancer cause. In addition to this, Haarder used another argument to justify the alleged lack of State support:

It would, of course, be better if the public authorities could contribute even more, but there are also other important research areas, and I feel that we have spent quite a lot of time and effort on cancer research.⁴⁸³

Haarder thus argued that the mere writing of the Kjeldgaard Report and the preparations of the comprehensive cancer centre were more than enough attention to the cancer field, although none of these initiatives had yet entailed additional appropriations from the State – be that the research councils, the Ministry of Education, or the Ministry of the Interior. The article further argued that the Danish Cancer Society was beginning to question the “State’s” willingness to build a comprehensive cancer centre, given that the government had not yet discussed the financial aspects of the proposed cancer centre, and that the Minister of the Interior, Britta Schall Holberg, had amputated the Finsen Institute by reducing the number of clinical posts from 26 to 14 in the spring of 1985⁴⁸⁴.

The article thus did not paint a pretty picture of the State’s involvement in the fight against cancer, and it was published while Haarder’s Building Directorate slowly started negotiations with relevant funding bodies in order to find the financial means to establish a comprehensive cancer centre in the Rockefeller complex. Many questions had to be answered before Bertel Haarder and Britta Schall Holberg would decide on which of the proposed models to go by. For *who* was to finance *what*? The article mostly quoted representatives of the Cancer Society, and it accordingly made the Cancer Society look good as it stressed that the charity sponsored up to two thirds of all cancer projects, although no precise balance sheets or numbers were presented. The article became the first major offensive from the Society against the public authorities in the power play that was ahead. The negotiators flexed their muscles in public, perhaps to use this forum as third party enforcement in the as of yet contract-less power play and centre-negotiating?

On December 4th 1985, a meeting regarding the Rockefeller plans was held in the Building Directorate of the Ministry of Education. Representatives from all the involved institutes were invited, and the purpose of the meeting was to determine the space requirements of the research

⁴⁸³ Ibid.

⁴⁸⁴ Ibid.

The Cancer Centre That Never Was

groups expected to move into the complex, and to find out how much the initial renovation and refitting would cost. The head of the Building Directorate, Preben Larsen, stated that a total of 4100 m² in the Rockefeller complex would be made available for the centre during 1986, and that this space could be shared between the Fibiger Laboratory, the Cancer Registry and the Finsen Laboratory⁴⁸⁵. Up to this point, the Danish Cancer Society had estimated that the activities of its two research units would require approximately 3000 m², and so the Finsen Laboratory was left with a total of 1100 m²⁴⁸⁶. The Building Directorate had calculated that the costs of the necessary renovation and reconstruction of the available premises would amount to DKK 65 million – special expenses for equipment not included – and according to Preben Larsen, the meeting participants had no fundamental objections to the spatial and financial proposal, and he therefore presented the centre plans in the Ministry of Education. In a following letter to the Society, Copenhagen University and Rigshospitalet, Preben Larsen explained the Minister's reaction:

The matter has subsequently been presented to the Minister of Education who has basically approved of further developments of the aforementioned basis on the condition that a reasonable clarification of the budgetary premises for the mentioned expenses will be worked out. This problem has been negotiated with the Ministry of Finance, and there is now such clarification available that the Building Directorate finds that there are sufficient grounds for continuous considerations about the establishment of the Cancer Research Centre.⁴⁸⁷

The Building Directorate thus gave a preliminary green light for continuing the negotiations for a majority model cancer centre now that the State's financial involvement had been specified. A transaction could be within reach. No defection as of yet. Ole Bang and the rest of the Danish Cancer Society were worried about the December meeting, though. Bang had given his and the Society's acceptance of the general terms for further planning of the centre, but he had not done so without hesitation. It was not at all clear to which extent the budgetary plans would be accepted by the Ministry of Finance, and in addition to this Bang had argued that an ongoing and rapid expansion of the research activities of the Fibiger Laboratory and the Cancer Registry would soon require more space than the Society had initially been assigned⁴⁸⁸. The increasing income of the Society had allowed it to plan for the establishment of a new experimental unit for

⁴⁸⁵ Letter from Preben Larsen to Ole Bang, Niels Hammer-Jespersen, and J. Rastrup Andersen, April 16th 1986, *Personal Papers of Keld Danø*, (Copenhagen), p. 1.

⁴⁸⁶ Letter from Steen Olsen and Ole Bang to the Ministry of Education, July 9th 1986, *Personal Papers of Keld Danø*, (Copenhagen), p. 1.

⁴⁸⁷ Ibid. p. 1-2.

⁴⁸⁸ Letter from Ole Bang to Preben Larsen, May 6th 1986, *Personal Papers of Keld Danø*, (Copenhagen), p. 1.

The Cancer Centre That Never Was

epidemiological and environmental cancer research, and this unit would have to be factored in as well. Also, there were plans of creating an annex laboratory for clinically relevant experimental research in cancers of the urinal tract, a clinical tumour-endocrinology research unit, and a molecular oncology group at the Fibiger Institute⁴⁸⁹. These were all space-consuming activities, and the Danish Cancer Society therefore demanded that in case the Rockefeller solution was agreed upon, it had to be possible to re-negotiate the spatial arrangements in the years to come⁴⁹⁰.

The Society was also beginning to fear that the public authorities such as the MRC, the NSRC, the Ministry of Interior and the Ministry of Education would go against the recommendations of the Rockefeller centre report by gradually trying to minimise their financial involvement in the establishment of the centre – gradual defection – and thus leave the private cancer charity with the lion's share of the expenses. The situation was thoroughly discussed within the management of the Danish Cancer Society, and in his annual report to the Head Board, Chairman Steen Olsen summed up the Rockefeller situation:

Many different interests have wished to be taken into account in this matter, but as the party that in any case will have to finance over 80 % of the running costs of the cancer research centre over the next years, we find it reasonable to stick to the previously agreed on negotiation platform. We therefore want the following three key points to apply to future negotiations:

First of all, it is our wish to contribute actively to the coordination of the Copenhagen area cancer research.

Secondly, we have stressed that a cancer centre should be established on the basis of an accumulation of the existing institutes (the Fibiger Institute, the Danish Cancer Registry, and the Finsen Institute), and that we cannot under any circumstances take part in a solution that presupposes a geographical separation of the Society's two institutes or parts thereof. Furthermore, we will naturally not accept any impairment of the present area extent and laboratory conditions.

Thirdly, we have offered to take on the costs of establishing our own laboratories in a Rockefeller complex fitted for laboratory work, but we have stressed that we did not find it reasonable that we should assume responsibility for the renovation of the State's property for privately collected money.⁴⁹¹

Although the chairman argued that the Society was all for a Rockefeller centre on these conditions, he and his organisation must have seriously doubted that the financial negotiations with the State would ever fall out right. At least, they had been looking for alternative ways to establish a centre and serving its own interest by keeping its research units together:

⁴⁸⁹ Ibid. p. 1-2.

⁴⁹⁰ Ibid. p. 1.

⁴⁹¹ Kræftens-Bekæmpelse (1985). Årsberetning, Kræftens Bekæmpelse, p. 16-17.

The Cancer Centre That Never Was

If the Rockefeller solution cannot be put into practice on the outlined conditions, we will, on our part, have to resign to the next best solution, which is that we will try to establish the cancer centre in the Danish Cancer Society's research building in Ndr. Frihavnsgade [the former Finsen campus], which is modern and well equipped for high-tech laboratory work. This is, however, only feasible if the part of the building which is rented to the State for Rigshospitalet's pharmacy, is released. In that case, one would be able to house the Fibiger Institute, the Cancer Registry, and the Finsen Laboratory, and in addition be able to provide laboratory space for other cancer research groups. During the negotiations, the Danish Cancer Society has stated that the expansions made possible by the Society's financial advancement, will, in the long term, make it necessary for the Society to have more research areas at its disposal. For this reason, we have presumed that in case a Rockefeller solution is decided on, we can arrange a negotiation procedure regarding the floor space that may later be available in the Rockefeller complex.⁴⁹²

A Cancer Society defection from the negotiations and Rockefeller plans was now a definite possibility. On May 13th 1986, the Rockefeller parties held another meeting at the Building Directorate. The Danish Cancer Society's need for space was brought up, and different solutions to the problem were assessed. According to Ole Bang, the Society was asked to come up with a detailed list of necessary requirements for laboratory space, and to consider if it would be able to manage the situation if it was promised an additional 1000 m² right away, whilst any further needs could be met in another 2-3 years⁴⁹³.

However, Bang was not satisfied with the outcome of the meeting, as he noted that Preben Larsen assumed that the Cancer Society would pay rent for the laboratory space it would be assigned. Following the meeting, he wrote a letter to Preben Larsen in which he clarified the Society's opinion on this matter. According to Bang, it was the Society's fundamental position that the Ministry of the Interior and the Ministry of Education should provide the laboratory space free of charge, as the Society would evidently have to take on most of the centre's remaining expenses⁴⁹⁴. However, if this was to be the crux of the matter, the Society was willing to negotiate. But given that meanwhile the Minister of Education had suddenly proved unwilling to pay all of the aforementioned DKK 65 million for renovation and reconstruction; it meant more expenses for the Danish Cancer Society. In his letter, Bang elaborated:

As you know, we are fighting nail and tooth to prevent the financial burdens of Danish cancer research from being increasingly placed on the Society. On this basis, we do not find it reasonable that, in addition to having to pay for the majority of the actual research activities in the Rockefeller complex, we have to pay rent to the State. The issue is further emphasised by Professor Pindborg's [the new chairman of the MRC, who was professor at the Dep. For Pathology and Medicine, CU] comment that with the support received by the

⁴⁹² Ibid., p. 17.

⁴⁹³ Letter from Ole Bang to Preben Larsen, May 15th 1986, *Personal Papers of Keld Danø*, (Copenhagen), p. 1.

⁴⁹⁴ Ibid.

The Cancer Centre That Never Was

Society from the Danish people, there was no need for the MRC to set aside more funds for cancer research. When Pindborg incidentally and unsolicitedly offered to give up the disposal of areas for MRC initiatives in the cancer research centre, it has to be seen against this background [the comment].⁴⁹⁵

It has not been possible to find sources that shed light on the reason why the MRC chose to give up its space in the Rockefeller centre to the Society. It may have had such a strong wish to establish the cancer centre so that giving away the space for the two MRC-supported research professors really was not a high price to pay, if it meant that the Danish Cancer Society would move its research units to the Rockefeller complex and that the centre would come into existence. Given that the minority proposal of the MRC centre report had been discarded, research professors Olsson and Larsson would not have any significant position or laboratory space in the centre anyway. And although the research council was undoubtedly trying to cut back its funds for cancer research, so that it could support other worthy causes that did not otherwise benefit from a wealthy private charity organisation like the Cancer Society, it does not make sense for the MRC to give up space in the Rockefeller centre for this reason, as Bang argued in the above. The MRC would still have to finance the two research professors, no matter where they resided. Ole Bang was almost certainly aware of this, and it would appear that he may have had other motives for lashing out at the MRC chairman Pindborg and his offer. Perhaps the Danish Cancer Society was trying to get out of the Rockefeller plans, and needed a pretext to do so? In this case, Pindborg's efforts to meet the stated needs of the Danish Cancer Society would have been very inconvenient to the Society. At least, that was how Preben Larsen from the State's Building Directorate saw it.

Immediately after having received Bang's letter, Preben Larsen retorted. He wrote to Bang and stated that while he had been sad to hear about the Society's initial anxieties about the spatial arrangements of the proposed centre, he simply could not understand the views presented by Bang in his latest letter:

In my opinion it has always been clear that the Society in some way had to illustrate its positive attitude towards the establishment of a cancer centre, but with the latest move I am more or less forced to assess the situation in the way that one does what one possibly can to prevent the plans from being put into practice, if the views and wishes of the other parties concerned should be taken into consideration.

On the basis of the floor space surveys we did in 1985, it was completely clear that it would be difficult to grant the stated wishes, and the Society's stated wish at the meeting on 13th May – despite of this – to be granted an expansion of its laboratory space with 1400 m² or approximately 40% more than the previously granted floor space, could at

⁴⁹⁵ Ibid., p. 1-2.

The Cancer Centre That Never Was

first glance be seen as prohibitive. I point to the fact that as recently as at the meeting in the Ministry on 4th December 1985 the Society indicated that it stood by the previously estimated needs for floor space.

Even so, I favoured continuing the plans, as I must assume that all concerned parties were still prepared to positively and actively contribute to the realisation of the plans for the cancer research centre. The fact that I – as stated at the meeting – have put quite a lot of energy into clarifying the financial problems reflects the State's emphasis on realising this project. The latest move in which the Society altogether refuses to participate financially – also through a subsequent payment of rent – makes the matter almost impossible in my opinion, but I will as a matter of course loyally present the problem to the Minister of Education.⁴⁹⁶

Shortly after, Ole Bang responded to Preben Larsen. He argued that Larsen's accusations against the Society were greatly exaggerated, and that it was hardly fair to say that the Society had disclaimed all financial responsibility for the centre⁴⁹⁷. After all, the Society was already financing 80% of the cancer research in the proposed centre and had not completely dismissed the idea of a rental arrangement. The rent was not a major expense compared with what the Society was already spending on the housing of the Fibiger Institute and the Cancer Registry, but Ole Bang and the Society did not like the political message of the arrangement: that the State believed cancer research to be a private affair⁴⁹⁸. As for the Society's need for more laboratory space, Bang would report back to Preben Larsen as soon as the Executive Committee had met with the two directors of the Society's research units, Jørgen Kieler and Ole Møller Jensen. Together, they would assess whether or not it would be possible and favourable to move the two units into the Rockefeller complex under the proposed spatial conditions⁴⁹⁹.

4.6 Collapse!

On 9th July, the Danish Cancer Society informed the Ministry of Education that it no longer wished to take part in the further planning of the Rockefeller cancer centre. Kieler and Møller had come to the conclusion that a move to the centre would mean an impairment of their working conditions, unless even more space could be released⁵⁰⁰. The Society's Executive Committee eventually decided that the Rockefeller solution simply did not offer enough space to house the ever-expanding Fibiger Institute and the Cancer Registry without splitting up the units, and this was not an option⁵⁰¹. The Society thus declined the offer of being part of the

⁴⁹⁶ Letter from Preben Larsen to Ole Bang, May 16th 1986, *Personal papers of Keld Danø*, (Copenhagen), p. 1-2.

⁴⁹⁷ Letter from Ole Bang to Preben Larsen, May 29th 1986, *Personal papers of Keld Danø*, (Copenhagen), p. 1-2.

⁴⁹⁸ *Ibid.*, p. 2.

⁴⁹⁹ *Ibid.*

⁵⁰⁰ Bang, O. (2004). *En personlig beretning om Kræftens Bekæmpelse 1981-1994*, Narayana Press, p. 24.

⁵⁰¹ Letter from Steen Olsen and Ole Bang to the Ministry of Education, July 9th 1986, *Personal papers of Keld Danø*, (Copenhagen), p. 1-3.

The Cancer Centre That Never Was

cancer centre in the Rockefeller complex. In Chairman Steen Olsen's annual report to the Head Board on 5th December 1986, the situation was explained as an unfortunate collapse of a good idea, and that in many ways the abandonment of the project was the result of the massive private donations to the Society and that this could only be considered a good thing⁵⁰². Furthermore, Olsen argued that:

This does not necessarily mean that the idea of a cancer research centre in the Copenhagen area has to be abandoned. The Society's research building in Ndr. Frihavnsgrde is modern, spacious and well-equipped, and when the departments of Rigshospitalet (pharmacy and pathological department) have been moved out, it will at the present time be able to house our own research activities and to some extent make room for other research groups which have a natural need for a close physical contact with the activities of the research centre. (...) As there will be additional space at the Finsen campus, when the move of Rigshospitalet's departments has been completed, we have contacted the Building Directorate of the Ministry of Education to inquire about our potential inclusion in the negotiations about the future use of the Finsen campus, with regard to our interest in disposing over additional buildings in the area.

We trust that the collaboration with the oncology departments of Rigshospitalet will be maintained and expanded, given that the distance from Blegdamsvej to Ndr. Frihavnsgrde is, after all, limited. Let there be no doubt that the Society will continue to work for a coordination of cancer research.⁵⁰³

The decision must have been frustrating for Preben Larsen and the representatives from Rigshospitalet, the University, and the MRC. They had all invested time and energy in the planning of the comprehensive cancer centre from which the Society had now pulled the plug, and to some parties the decision must have seemed rather rash. The Society's argument to defect from the project must have puzzled the other negotiating parties, as the space problems had been known by all for quite some time. Perhaps the Society could have pulled the plug on the centre plans a little earlier in the planning process instead of putting on a performance at a negotiating table they might not really wanted to join? This evoked anger amongst the others who felt that their time had been wasted. Ole Bang was very aware of this:

After five years of discussions, the anger of our collaboration partners was great and understandable. I agreed with the decision of the Executive Committee, but in retrospect, it was a mistake not to acknowledge the situation at an earlier stage.

After that, our three collaboration partners tried to carry out the Rockefeller plan without us – but unfortunately their efforts were in vain. As for us, we began working on the alternative plan for the establishment of "The Danish Cancer Society's Research Centre" in our research building at the Finsen campus.⁵⁰⁴

⁵⁰² Annual report of the chairman (1986), *Personal papers of Ole Bang*, (Copenhagen), p. 11.

⁵⁰³ Ibid. p. 11-12.

⁵⁰⁴ Bang, O. (2004). *En personlig beretning om Kræftens Bekæmpelse 1981-1994*, Narayana Press, p. 24.

The Cancer Centre That Never Was

As mentioned above, the Society was already making plans for an alternative centre at least *seven months* before it backed out of the Rockefeller plans. So why did it not retreat from the Rockefeller plans at that point? Why did it go on for at least seven months of intensive bargaining about extra square meters? It seems as if the Society may have had other motives for dropping the Rockefeller plans than the mere lack of space. In his memoirs, Ole Bang offers a possible explanation:

In overall terms, it was the position of the management – a position that I incidentally had expressed in my job interview with the Executive Committee – that as a general rule, the operation of cancer research institutes had to be the responsibility of the public authorities. The main strategy of the Danish Cancer Society had to be to start new research initiatives (including institutes) for a limited amount of money, as we had done with the Danish Cancer Registry, the efforts within the field of environmental carcinogenesis, and the establishment of a department for experimental clinical oncology. When the initiatives had proved their viability, we had to strive towards making their continued development and operation a governmental responsibility. During the 1980s, however, it became clear that this strategy was completely unrealistic for financial reasons. Our efforts to strengthen cancer research thus had to include the continued operation of our own research institutes with the advantages such a thing implied and the demands it posed for firmness of intent, among other things. This did not just concern new initiatives, but also the termination, reduction or radical changes of already established initiatives.⁵⁰⁵

As it became clear to the Society that a potential State takeover of the Cancer Registry would most likely mean a considerable impairment of the units' financial situation and scientific work, the private cancer charity gradually gave up its ambition of handing over all of its research units to the public authorities. In fact, only the departments of the Aarhus Cancer Research Institute were ever successfully integrated in a university hospital, after the Society's International Scientific Advisory Committee (ISAC) had advised the Society to split up the institute and terminate or move the different departments to public research institutions in Aarhus⁵⁰⁶. Also, Ole Bang and the Executive Committee of the Society had begun noticing certain advantages in running their own research units.

As mentioned before, the 1980s financial situation in Denmark was characterised by heavy inflation. During periods of heavy inflation, the interest rate is usually also high, and for a private business like the Cancer Society this could have meant a high yield of its capital. However the interest rate is subject to great variation, whereas investment in real estate would

⁵⁰⁵ Ibid. p. 20-21.

⁵⁰⁶ The departments in question were: 1) E.B. Thorling/Diet and Cancer, 2) Bent Mogensen/ Immunoserology 3) Bent Pedersen/cytogenetics, 4) Peter Ebbesen/Cancer virology and 5) Jens Overgaard/Exp. clinical oncology. The annual ISAC reports (1983), (1984) and (1985), *Personal papers of Jes Forchhammer*, (Bagsværd). Annual report of the chairman (1986), *Personal papers of Ole Bang*, (Copenhagen), p. 13. Amdrup, E. (1998). *Som jeg så det - en kirurgs tilbageblik*. Danmark, Gyldendal, p. 190.

The Cancer Centre That Never Was

be much safer for the private Cancer Society which was heavily dependent on the voluntary contributions of the Danish people. The investment in physical buildings was thus seen as a way of protecting the increasing capital of the cancer charity against the strong inflationary pressure of the 1980s, and from the point of view of the private Society it therefore made sense to buy the Finsen campus from the State immediately after it resigned from the Rockefeller project.

But although this was supposedly a sound and acceptable strategy from the point of view of an economist like Ole Bang and anyone else from the financial world, it would not please the more traditional-minded parts of the scientific community. As will be evident in the following chapter, many cancer researchers still thought of the Danish Cancer Society as a modest cancer charity – a foundation – and *not* a modern business with aggressive business strategies. According to one of the Society's physicians, he was often met with the notion that a foundation was supposed to invest in research projects rather than in bricks, and he thus felt that the newfound wealth and ambition of the private charity was fraught with problems⁵⁰⁷.

The Executive Committee of the Society made long-term investments in bricks and mortar in order to secure Danish cancer research in case the Society ceased to receive the testamentary gifts and private donations which were the organisation's entire basis of existence. In other words, they did what they had to do to survive under difficult market conditions (formal constraints), which thus greatly influenced the way the Cancer Society acted and planned for the future. However, the Executive Committee must have suspected that Preben Larsen, Rigshospitalet, the Copenhagen University, and the MRC would not accept this argument as a legitimate way out of the Rockefeller project. Rather than seeing the investment in research buildings as a way of securing funds for future cancer research, the representatives could easily see it as an obstructive case of property speculation which was not in tune with the modest ideology of traditional charities.

Ole Bang never brought the matter up during the negotiations for the comprehensive Rockefeller centre, but as it turned out this evasive manoeuvre could not prevent the Society from incurring the wrath of the negotiating partners. This is understandable, given that the Society had made an actual U-turn during the negotiations: from being very interested in the Rockefeller centre and handing over its research units to the State (to be placed at either Rigshospitalet or the University), to pulling back from the negotiations in order to pursue its own plans of buying

⁵⁰⁷ Ibid., p. 192.

The Cancer Centre That Never Was

property for a privately financed cancer research centre. And although it made good financial sense for the Society to act as it did, the decision was not met with understanding by parts of the scientific community who did not necessarily accept the cynical dispositions a business leader has to do in order to make his business thrive or simply survive, as will be evident in Chapter 5.

According to the theories of Douglass C. North, the development of the negotiations for the cancer centre and the Society's withdrawal from the Rockefeller project is not surprising. As mentioned in chapter 1, the decisions of an organisation are restricted by formal and informal institutions. Only stable institutional settings will lead the organisation to believe that it will gain continuously from a transaction over time and therefore maintain the same choice/action in order to secure an efficient bargaining power. However, if the institutional matrix changes, so might the organisation's choice and actions. Most institutional change is incremental, but over time even these small changes create new situations for the organisations and evolve into a different set of choices than was originally the case. The increased wealth of the Cancer Society from 1980-86, the international economical instability of the time, and the changed managerial style of the private cancer charity eventually led the organisation to doubt whether the centre plans were in fact supporting or threatening the continued survival of the organisation itself. It thus reversed its initial attitude towards the proposed Rockefeller centre.

But although these changes in economy and organisational strategy led the cancer charity to defect the Rockefeller plans, the organisation still put forward a suggestion of establishing a cancer centre at another and (for the charity) more lucrative location. This suggestion, although content-wise inferior to the comprehensive Rockefeller vision, served the purpose of protecting the cancer charity against the decreasing societal returns, PR and collegial attacks that would surely arise from a complete abortion of the cancer centre idea. The MRC chairman Pindborg pressed to continue the Rockefeller project in spite of the Society's defection, but his efforts were in vain. With the loss of the dominant funding body, the Minister of Education no longer believed in the project and withdrew his previous offer of financing the rebuilding and renovation of the Rockefeller complex⁵⁰⁸. The money was not automatically reserved for the proposed larger cancer centre at the Finsen campus, however.

In essence, the matter can be seen as an organisation (the Cancer Society) reacting to a multi-level problem (the planning of a public-private cancer centre) by utilizing the opportunities

⁵⁰⁸ Lecker, S. and A. Kjær (1994). *Kræftens Bekæmpelse - en organisation i modvind*. Institut for Organisation og Arbejdssociologi, Copenhagen Business School: 116., p. 45-46.

The Cancer Centre That Never Was

given by institutional changes/constraints on many levels. A global recession resulted in strict national/state level financial policy and minimal state research support. This acted as constraints for the public researchers, the University and the hospitals who were pressed to find alternative funding elsewhere in order to maintain their laboratories and funding levels in reasonable states. By appealing to the State for a cancer centre like the one proposed in the Kjeldgaard Report – using socio-economical arguments to underscore the value and applicability of “cancer research” and a “cancer centre” with the ability to bridge bench and bedside – these public researchers and their organisations teamed up with the Danish Cancer Society which, who for strategic and PR purposes, had kept the centre dream alive throughout the last decade of abundant science push state support (favourable formal institutions) and unfavourable informal institutions (the researchers’ lack of need to appeal for special budgets or conditions for categorical research centres). Now, the State’s support for science and medicine had changed dramatically, and a three-partite strategy to attract more funding was put in motion to 1) argue the applicability of cancer research (“it pays to invest in cancer research as it yield better treatments”) and demand additional funding for this venture, 2) team up with the Cancer Society who traditionally supported this strategic science policy and thus attract funds from this organisation, 3) appeal to the public to create new and powerful informal institutions (the taste and preferences of the politicians’electorates) to affect State policy.

And while the State entered into negotiations for a cancer centre in the hope that a centre could be established cost-free as part of existing hospital plans – or by getting the Cancer Society to cover the lion’s share of any additional costs – the cancer organisation tried to affect the State and the public to expand the institutional matrix sufficiently for it to carry through its shifting strategies whilst it gained strength and leverage through the competence of an individual, its new director Ole Bang. The matter illustrates how the institutional matrix surrounding the Rockefeller plans was not subject to a one-directional top-down change such as e.g.: global level→ state level→organisational level→individual/public level. On the contrary, the matrix seemed to be the result of a multitude of intertwined and unidirectional movements across levels. Some were successful in bringing about (incremental) change and affecting the actions of others, and some did not have enough momentum or power to bring about change to others. As the next chapter will show, an organisation could be just as (or even more) vulnerable to informal constraints created on the individual level as it would be to formal constraints from a State level. For this reason, a “level”- specific analysis is not the aim of this thesis.

4.7 Summary

The plans to establish a comprehensive cancer centre in Copenhagen was a chance for the cancer community to:

- 1) Coordinate and strengthen the Copenhagen cancer research for a more efficient attack on cancer and to change formal institutions towards the State prioritising the area financially.
- 2) Signal a united front in the war on cancer: that the many different research and clinical activities made in the war on cancer were in fact different but mutually beneficial and that it should be prioritised politically and (secondarily) recognised professionally in the scientific-medical communities on a par with the established disciplines and specialities they sprang from.
- 3) Decide on the future of the Danish Cancer Society's research units. The idea of coordinating differently managed and financed public and private research groups originally (in the Kjeldgaard Report) implied a State takeover of the private Cancer Society's research units. The management set-up of a new centre would have to be flexible enough to accommodate a gradual ownership change of the Society's units over the years to come.

Following the Kjeldgaard Report, a MRC-led working group set out to sketch a model for a comprehensive cancer centre in a report to the government. The green light for such an arrangement was given by the Minister of Education, provided that the new centre could be established within the confinements of the already planned expansion of Rigshospitalet and at no additional costs. This was an expression of the government's financial strategy to control the growth of public expenditures that had boomed throughout the previous decades. A no-growth policy for public expenditures meant no actual downsizing per se, but in the hospital sector the policy was felt as serious budget cuts inasmuch as the introduction of new and expensive treatments and more hospital admissions had to be provided on a "frozen" budget. This inevitably led to unpopular economic prioritising in the health care sector when it came to how to allocate existing funds. Were some services, treatments, diseases or patient groups more deserving of support than others?

The plans of a comprehensive cancer centre in theory played into these formal institutions set by government inasmuch as a united attack on cancer through the establishment of a

The Cancer Centre That Never Was

comprehensive cancer centre would supposedly have long-term socio-economic effects in the form of improved cancer treatment and prevention (as stated in the Kjeldgaard Report). Provided, of course, that the centre could bring about a synergy effect between existing anti-cancer initiatives in the Copenhagen labs and clinics. And provided that such a synergy effect and the centre facilitating it could be established at no additional costs which had definitely not been the idea in the Kjeldgaard Report that revived the idea of the cancer centre. In this way, the formal institutions were not favourable for a cancer centre.

Also, the task of finding unity in the cancer community and sketching a consensus model for a cancer centre proved very difficult from the start under the given institutional matrix. The planning parties held very different views and preferences on matters such as content, form and financing of the centre. So much that the former topic was only vaguely touched upon in the planning process. This was most likely done in order to prevent the proposed centre from collapsing in its making, as communicative efforts and diplomacy were needed to unite the financially pressed planning parties in compromise if the centre was ever to have a chance on the zero-sum-game conditions. The matter of scientific content was irrevocably linked with a selection and exclusion of research groups belonging to these planning parties, and the working group was not ready to address this issue up front or to find a model to accommodate the conflicting interests in the group. It would not be in the interest of the working group as a collective to display conflict over the basis of a centre if that State was ever to provide additional funding or even the proposed laboratory space for the centre. Instead, the group focused on the financing and management of the centre. These matters typically courted disagreement as well, but this most have been seen as part of a “natural” administrative negotiation rather than a matter relating to the very rationale of a centre.

And the members of the MRC working group planning for the centre did not agree on these points either. The members thus handed in a report outlining both a majority and a minority model. The majority model resembled the comprehensive cancer centres of the Kjeldgaard Report, and was to be run by a Supervisory Board consisting of representatives of each institute (Rigshospitalet, the Society, Copenhagen University and the MRC) and a Coordination Council with representatives from the research groups of the centre. A model that might have aimed for unity through a managerial model satisfying all different funding bodies, but which severely lacked focus on a unifying research program for the centre’s potential inhabitants. Form, not content! Also, it presupposed that the Ministry of Education would agree to allocate funds for

The Cancer Centre That Never Was

modernising and equipping the physical building housing the centre. And this was not in direct accord with the formal institutions of the time.

The minority model, on the other hand, tried to play into these institutions with a different financial model and a focus on content (prioritising a specific research program) by proposing a biotechnology centre financed by biotechnology program funds and the patent profits of the centre's researchers (in particular Lennart Olsson who was given a prominent place in this centre), and which was to be run by a director appointed by Rigshospitalet according to statutes written by the MRC. However, this model excluded clinical activities from the centre and thus did not resemble a comprehensive cancer centre. Also, it made no attempt to unite the involved parties of the cancer community through a common managerial model which by the minority was considered an impossible task. It would be a centre of independently managed groups united only through a biotech-approach to cancer. Content, not form!

Both models presupposed that the physical coordination of the centre's research groups would result in a "synergy effect": that something new would emerge that could not have occurred without the centre. But neither of the models referred to such documented effect from other known centres in the World. Therefore, the additional scientific and socio-economic effects of coordinating the Copenhagen area cancer research remained a loose and intangible promise. In this sense, the MRC working group did not plan for the centre in the manner that the Washington conference on planning for cancer centres (chapter 3) had concluded was best. The Washington model was based on more than a decade of experience of building cancer centres, and according to this, planning for a cancer centre should proceed through the following steps:

- 1) Identify a viable and shared research program.
- 2) Identify relevant research groups.
- 3) Find a director and a managerial/financial set-up.
- 4) Find a proper location.

In Denmark, the MRC working group focused on similar steps but in a different order: 4, 3 & 2. Step 1 was apparently expected to occur automatically. However, up until this point cross-disciplinarity and cross-organisational collaboration had not emerged by itself between the existing research milieus. At least not in the opinion of researchers not present at the planning and negotiation table. The researchers therefore began bilateral discussions of this topic after the MRC working group had handed in their report to the government. They concluded that unity

The Cancer Centre That Never Was

and collaboration in a cancer centre would require an organisational and managerial set-up that would potentially deprive the funding bodies/planning parties of some of their influence on the centre. In other words, it could disturb the delicate power balance between these parties which may be why the matter of centre content was not discussed in the official report.

Given that the working group had not been able to present a consensus model for a centre, further evidence of (irreconcilable) differences between the planning parties would not have been positively received by the Minister of Education and the Minister of the Interior in their assessment of the proposed initiatives and their odds of success. A poorly described project content does not necessarily mean that no one will fund a project, if the benefactors have faith in the project's aim and organisation. A publicly known conflict over scientific content, on the other hand, would illustrate to the state and the public that the proposed centre had an unstable foundation if the planning parties could not even agree on this point.

So while the majority model of the report signalled a united public-private front against cancer, the project organisation was in practice only as strong or as brittle as its ability to agree on the centre's content – the research program – as defining such a program would naturally lead to including and excluding different lines of research, research groups and perhaps even planning parties from the centre. The omission of the inherent scientific conflict over centre content in the official report was a short sighted solution to win time and perhaps binding agreement from funding bodies.

The report, including both models, was presented to the Minister of Education and the Minister of the Interior who had to decide which model to back. With their blessing, the negotiation parties eventually continued developing the majority model of a comprehensive cancer centre at the Rockefeller Institute, despite the lack of content presentation, and despite the fact that the proposed multi-institute management of this centre would not necessarily function in practise, as cancer researcher Keld Danø pointed out. The project would be a joint co-operation between the State-held Rigshospitalet, Copenhagen University, the MRC and a private anti-cancer organisation (the Cancer Society) who each held different views on cancer research and research administration and had to protect their autonomy and interests.

A successful establishment of the centre thus depended on a power-balance between these institutes. And the balance in return depended on a fair division of financial responsibility and laboratory space between the different planning parties. If the matter of a shared scientific

The Cancer Centre That Never Was

program to be addresses up front in the planning process, it would be in a scenario in which the state supplid the majority of the centre funding. In this way, the groups would be more likely to select research group for the centre on the basis of their scientific relevance to a shared program rather than on the basis of the quid per quo principle of financial negotiations between the many smaller funding bodies at the negotiation table. As such level of state funding was next to impossible to obtain at the time, particularly the Danish Cancer Society must have realised that the financial burden would eventually be brought on its shoulders. This alone would effectively change the power balance between the negotiators. And the balance did shift dramatically as the income of the Cancer Society increased considerably from year to year.

The growth of the Society owed in part to the financial skills of the new Society director Ole Bang, and partly to the government's financial policy to control public expenditures and make economically based – rather than medically based – priorities in the health care sector. This policy was very unpopular with the Danes. Especially when such priorities backfired in a very public scandal about budget cuts of HIV screening of donor blood. The private Cancer Society capitalised on doing what the man on the street thought the State ought to be doing. In other words, the organisation thrived by utilising the existing institutional matrix created by governmental policy and the public feedback to it, as the Society enjoyed increasing returns in the form of charitable donations for the anti-cancer cause. Whilst the Society did not succeed in making the cause a state financial priority by creating institutional change (like the Kjeldgaard Report had called for), it succeeded in making it a people's cause under the existing institutional matrix.

Sociologically speaking, this fruitful strategy gave the Society improved wealth and influence – symbolic capital – in the social field of the cancer community and the broader public society. And it gave the Society a new platform from which to negotiate its involvement in the proposed cancer centre. A new situation was suddenly created that required careful management evaluation of the Society's future strategy in the matter of the cancer centre. Should it act as the modest and physician dominated charity as in the beginning of the 1980s, or should it continue to follow the winning strategy that had transformed it into a modern corporate charity employing modern business strategies?

The society chose the latter with the official explanation that the financial growth had led to an expansion of the Society's scientific activities at its research units. In 1986 the Society pulled back from the Rockefeller plans arguing that these plans would no longer be able to give the

The Cancer Centre That Never Was

Fibiger Laboratory and the Cancer Registry enough laboratory space. However, at the same time the research councils and the Ministry of Education were gradually downsizing their support for cancer research projects and the proposed Rockefeller cancer centre, respectively, because the government was actively trying to reduce the national debt and therefore did not want to commit itself to costly projects that could otherwise be financed the wealthy Cancer Society.

The Cancer Society disliked being forced into financing the lion's share of the centre without being given proportionate influence on it. With the increased income, the Society had become the major powerbroker of the cancer community over the course of just a few years and it could not be expected to go along with just anything, especially not if it went against the cancer charity's interests and strategy to survive (through asset management, publicity, investment in real estate etc), and the organisation thus pulled out of the Rockefeller project whilst arguing that the centre could no longer provide sufficient laboratory space for the Fibiger Laboratory and the Cancer Registry. But although this was the official explanation for the defection from the planning process, there seemed to be more to the matter than this.

The Society had looked into the possibility of buying the Finsen area and establishing a private cancer research centre there for no less than seven months before backing out of the Rockefeller project. Taking the market conditions (inflation) of the time into account, the private cancer charity began to speculate in ways to protect its assets and secure its continued survival and support for the anti-cancer cause for years to come. The Society's director Ole Bang and the rest of the Society's direction thus changed their minds about handing over the Society's research units to the State, as the units held publicity value for the private business and because the investment in real estate was a potential financial strategy to protect the wealth of the Society against the inflationary pressure. Institutional constraints such as the market conditions were thus determining factors in the Society's choice of strategy during the Rockefeller negotiations. But when the cancer organisation pulled out of the project, it upset the other negotiation parties who had spent time and energy on planning for the comprehensive cancer centre. The Society's involvement in the project was pivotal, as the cancer charity would be one of – if not *the* – most important funding body. The fact that the Society had continued to negotiate for seven months after having begun to search for an alternative solution at the Finsen area did not make things better. From the perspective of the Society's management, however, this was a sound decision owing to the fact that the organisation was in the process of finding its strategic stance in times of great financial and managerial transformation from modest charity to corporate charity.

The Cancer Centre That Never Was

According to the business logics of Bang, it was very wise for an organisation like the Society to find out if the positive economic development it experienced was a significant and continuous trend or if it was just a fluke, isolated phenomena before committing to any larger financial agreements. For this reason, the Society wanted to keep their options open with both the centre and the investment strategy.

Still, as the next chapter will show, the collapse of the Rockefeller plans did not lead to the collapse of the cancer centre idea all together. It was carried on in a new and scientifically quite different form that no longer resembled a comprehensive cancer centre.

In a path dependence perspective, this should have been the logical end of the centre-path – that is the path's destruction – but it was not. And this is where the path dependence perspective offers the case nuance. The internal political and financial rearrangement in the Cancer Society (budget reform, new director etc.), the formal and informal institutions set by government and the public response to governmental policy, and the financial manoeuvring of the Society's new direction led the private charity to newfound wealth and influence from 1980-1986. The results of and feedback to this strategy made the charity start questioning whether the institutional framework that girded the idea of the comprehensive cancer centre would in fact threaten or support the organisation's chance of survival in the 1980s pressed economy. From its start by the Kjeldgaard Report, the comprehensive cancer centre had been part of an offensive to change formal institutions in favour of a political prioritising of cancer research. As mentioned in chapter 3, the Report did not have enough leverage to create institutional change, but the government allowed the idea of a centre to be continued, on the (crippling) condition that it could be done for no additional funds (under the existing formal institutions). The negotiation parties initially agreed to continue planning under these terms. However, the Society's sudden increase of symbolic capital during the planning for a cancer centre gave the charity new options for optimising its standing and fulfilling its objective than the establishment of the Rockefeller cancer centre. The cancer charity eventually decided that the centre plans in their current form were in fact not convergent with the Society's newfound symbolic capital and strategy in the social field of the cancer community. It therefore defected from the Rockefeller transaction.

According to the conceptual framework of Douglass C. North, the Society's actions were far from surprising. An organisation is restricted by formal and informal institutions, and only stable institutions will lead the organisation to believe it can gain continuously from a

The Cancer Centre That Never Was

transaction over time and maintain efficient bargaining power in such transactions. However, with institutional changes (even incremental ones) the organisation's choices in a matter might change over time. In the case of the Rockefeller centre, the Society started out by backing the plan in the belief that the plan was the best way to support its anti-cancer cause through 1) a synergy effect of the research it supported and 2) through using the plans to make the State assume financial responsibility of the private research units (the Society's spear head strategy); thus freeing up capital for direct research support rather than investments in bricks and mortar which was too expensive for a modest cancer charity that would rather function as a foundation. This was the strategy of a modest cancer charity with limited funds and power, to which a change of formal institutions (State takeover of research units) was needed to survive. However, the situation quickly changed due to a series of events:

- The restrictive governmental financial policy maintained formal institutions that were not compliant with such change.
- These formal institutions soon became increasingly unpopular with the Danes (= an incremental change of informal institutions in the form of taste and preferences).
- The Society hired a new director with great business skills to exchange this institutional matrix to wealth and symbolic capital.

These events opened new windows of institutional opportunity for the Society and caused it to change its strategy and its choices in the matter of the Rockefeller centre. Its support for the cancer centre was fraught with too many unknown factors such as the financial arrangement between the negotiating parties (including the uncertainty surrounding the government's attitude towards financing the modernisation and equipment of the Rockefeller buildings), the fate of the Society's research units in the proposed centre, the nature of a potential research program, and the political agendas of the other planning parties. Agreeing to finance part of the centre would be equivalent to a traditional financial transaction. And according to economic theory, a transaction based on such incomplete information about the other transaction partners is in risk of suffering defection. Especially, if the centre was originally planned to be the tool to change formal institutions towards favouring cancer research and making it a financial priority of the government.

Such a political agenda of the planners was not likely to succeed any time soon, and as the Society thrived in the institutional matrix the centre plan was originally planned to change (as

The Cancer Centre That Never Was

put forth in the Kjeldgaard Report), the Society had to re-evaluate its participation. Why engage in a project fraught with so many uncertainties compared with the new strategy that seemed to be working for the organisation? Why not serve the Society's own interests by making sound investments in real estate, create a privately controlled and financed research centre that would not split up or impair the Society's research units, and secure future capital for the fulfilment of the organisation's anti-cancer cause?

However, defection from the plans would not be popular – although logically based. In the absence of a third party enforcer as seen in traditional contractual economic transactions, the Society was really only in danger of suffering a decrease in broader societal returns (the public opinion and contributions) if defection was portrayed unfavourable in the press or resulted in internal conflicts in the cancer community. That is, if the decision to defect was not seen as a logical choice to best support the anti-cancer cause. And although this was a serious threat to an organisation that depended on its image and charitable donations, such a negative portrayal in the media was not made at this point in history. And why not? Why did the path of the cancer centre not collapse due to the defection?

The answer to these questions is that the Society simultaneously presented plans for a new centre maintaining its chief objective of coordinating Copenhagen cancer research. And although this centre did no longer entail clinical activities because it was not placed at a hospital or medical faculty – and was no longer a comprehensive cancer centre – the centre was “sold” to the public and the cancer community as the means to showcase unity of the heterogeneous cancer field. Though the defection from the Rockefeller plans evoked anger amongst the negotiation parties, they did not immediately dismiss the idea of the new and scientifically inferior centre at a different location. And why is this? The path was perpetuated in spite of a deteriorating content compared with the original comprehensive vision. From a sociological perspective, the scientifically heterogeneous cancer community may have had much at stake beside the actual coordination different research groups' work.

Whereas the recommendations of the Kjeldgaard Report had called for institutional change in favour of the State prioritising “cancer research” as a field with higher level of funding, it had become clear that such institutional change would not occur, and the omission of content presentation in the MRC report's majority model (the Rockefeller plans) can be interpreted as the planning parties' attempt to just get something out of the situation.

The Cancer Centre That Never Was

First and foremost, though the parties could not document or guarantee any synergy effect of coordinating the existing cancer research milieus, and that the plans were thus in danger of being nothing more than a very expensive move of research groups, there may have been an interest from some of the planning parties in getting the State to finance the modernisation and equipment of the Rockefeller plans as this would improve the working conditions of many of the research groups. But even this went against the original deal with the Ministry of Education: a zero-sum game coordination. In order to persuade the Ministries of Education and the Interior of such additional funding, the planning parties would have to put up a united front. And this may have been the reason why the matter of a research program for the centre was not thoroughly discussed in the Rockefeller report, as deciding on a specific scientific objective would no doubt be difficult due to the heterogeneous nature of cancer research and because it would potentially lead to conflicts between the planning parties. Any selection of a specific program entails the exclusion of others.

The exclusion of research lines would mean the exclusion of research groups from the planning party organisations: the University, the hospital and the Society. And in times of decreasing State support (the State research councils) for cancer research, exclusion could be very costly for these organisations. In summation: signalling unity by postponing the difficult matter of centre content can be interpreted as the cancer community's attempt to get State approval for planning for a cancer centre that could perhaps yield some measure of additional State support in spite of the formal institutions and zero-sum games of the time. And in this perspective, the content and location of the centre is not as important as the potential financial gains to be made for the individual cancer research milieus. Of course, the lack of clinical contact in the new centre meant exclusion of at least some hospital researchers. But given the fact that the suddenly wealthy Society was now the major powerbroker and funding body in the cancer community, any disgruntled voices may have drowned in times of recession and downsizing of State funds for cancer research, as any initiative from the wealthy Cancer Society would not be immediately dismissed by the public research institutes in order to "follow the money" so to speak.

Secondary to this objective, one could think of another sociological gain to be made from the centre plans. A strive for a shared identity, unity, and recognition (symbolic capital) by their peers as an independent discipline or speciality may have played a role in the perpetuation of the centre path, although the Society's new centre plan was markedly different than the one proposed by Engelbreth-Holm, the Kjeldgaard Report and the MRC working group. If a cancer

The Cancer Centre That Never Was

centre – no matter the location – was in fact established, this would probably be a first step towards “institutionalisation” of cancer research on a par with the academic disciplines and specialities from which the field sprang at the universities and hospitals. A gain of cultural and social capital.

In conclusion: for a short while the informal and formal institutions were almost in favour of continuing the path of the cancer centre. But informal institutions can be idle and change quickly, as the Society would soon experience in the years to come. The Rockefeller plans did not succeed in coordinating cancer research or changing the formal institutions in favour of cancer research, nor was it able to showcase the cancer community as a united front in the war on cancer. Would a Society dominated centre be able to succeed in this?

The Cancer Centre That Never Was

Table 4.1: Gallery of key persons in chapter 4

Name:	Institutional affiliation	Representing State/Cancer Society	Pro a Rockefeller Centre	Con a Rockefeller Centre	Summary of actions in this chapter:
Budget-and Planning Director J. Rastrup Andersen	-The Budget and Planning Department, Copenhagen University -Member of the working group behind the Rockefeller Centre Report	“State” (Copenhagen University)	X (the majority model)	-	Wanted the Society’s research units (the Fibiger Institute and the Cancer Registry) to be integrated in the Copenhagen University’s Medical Faculty.
Professor Svend Olav Andersen	- Department for Biological Chemistry A, Copenhagen University - NSRC member (until 1985)	“State” (The NSRC, Copenhagen University)	X (minority model)	-	He supported the proposal of a cell biology centre at the Rockefeller Institute, which is not surprising as he was an NSRC-member. He did not want this centre to include the clinical units of the Finsen Institute, as the centre was to focus on basic cell biological problems. He proposed that the centre should be financed in part by national biotechnology program funds and by the income of patents from the researchers in the centre (in particular Lennart Olsson), which played better into the formal institutions set by government than a cancer centre. Proposed that the centre should have a leader appointed by the Rigshospitalet and governed by statutes written by the MRC and NSRC.

The Cancer Centre That Never Was

	- Member of the working group behind the Rockefeller Centre Report				
Mr. Ole Bang	-Director for the Danish Cancer Society - Member of the working group behind the Rockefeller Centre Report	Society	X (until 1985) Majo- rity model	X (from 1985)	Until 1985, the Society and its Director Ole Bang wanted to integrate the Society's research units at the Medical Faculty of Copenhagen University. Bang thus supported the Rockefeller Centre. In this way, the private charity was not obliged to tie up money in bricks and mortar, but could instead channel the money directly into research projects. The economist Bang's purpose was to serve the Cancer Society, and he believed this could best be done by running it as a modern business, and he thus subscribed to a private business logic assigning a high priority to rational target attainment, asset management, publicity, and fundraising. He was very successful in doing this, increasing the organisations income considerably. Bang also represented the Society in the negotiations for the Rockefeller Centre, but he worried that the other negotiation parties wanted the Society to finance the lion's share of the centre and even expected the Society to pay rent for its laboratory space in the centre, although the Society claimed to be financing up to 80% of the centre's operating costs already. In 1986, the Cancer Society withdrew from the Rockefeller project. Due to the Society's great financial and scientific expansion, Bang and his management claimed that the Rockefeller centre plans did no longer allow for enough room for the Society's expanding activities. However, Bang and the Society had known about these space problems for a long time and started planning for a separate private cancer research centre at the Finsen grounds seven months prior to the decision to withdraw from the Rockefeller project. It would seem that Bang/the Society had changed

The Cancer Centre That Never Was

					their minds about operating the Society's own research units, as the investment in physical buildings and research offered certain advantages to the Society in the form of PR, financial protection against inflationary pressure etc., and Bang thus changed strategy and wanted to acquire the Finsen lot for a private cancer research centre. New institutional framework laid the ground for new organisational choices.
Ass. Prof. Elisabeth Bock	-The Protein Lab, Copenhagen University - Member of the working group behind the Rockefeller Centre Report	"State"/ University	X Majo- rity model	-	Wanted a centre, but did not want it to disturb the organisation of the Medical Faculty or take space away from its other research fields and activities. Wanted the Society's research units to be integrated at the Medical Faculty under academic management. She may have hoped that the Society's involvement in new organisational structures such as the Rockefeller Centre would increase her chance of securing funds and better facilities for her line of work.
Prof. N.O. Kjeldgaard	-Mol. Bio. Department, Aarhus University. - Executive Committee of the Society - Member of	The Society	X Majo- rity model	-	He was the author of the Kjeldgaard Report (1981) that had suggested the establishment of a comprehensive cancer centre, but as a member of the Society's Executive Committee he now adopted the values and norms of this private business and agreed with the decision to withdraw from the project in 1986, as Jørgen Kieler and Ole Møller Jensen had suggested. Also, the Rockefeller centre did not really resemble the centres Kjeldgaard had proposed in the Report in terms of size, budget, and the financial involvement of the Ministry of Education.

The Cancer Centre That Never Was

	the working group behind the Rockefeller Centre Report				
Maj. Cons. MD, Nis I Nissen	-The Medical Department of the Finsen Institute -MRC member (1983-1987) - Member of the working group behind the Rockefeller Centre Report - Head Board (1980-1991)	State/MRC & the Society	X (majority model)	-	The clinician Nissen liked the Rockefeller centre because it brought bench and bedside closer together (clinical, exp.- and epidemiological research and treatment). Also, the Society's involvement in a centre might mean more funds for clinical research. Nissen wanted the Society's research units to be integrated at Rigshospitalet, where he worked (hierarchical hospital structures). He was among the group of clinicians who welcomed the interaction of molecular oncology and the clinic.
Prof., MD, Steen Olsen	-Aarhus Municipal Hospital. - Chairman of	The Cancer Society	X (majority model)	X (1986)	As the rest of the Society's management, Chairman Steen Olsen wanted to establish a comprehensive cancer centre at the Rockefeller Institute until 1985, and up until this point he also wanted the Society's research units to be integrated at the University's Medical Faculty. But although Olsen wanted the centre to be established, though under better spatial and

The Cancer Centre That Never Was

	the Society (1981-1989). - Member of the working group behind the Rockefeller Centre Report.				financial conditions than what the negotiations led to, he supported Jørgen Kieler and Ole Møller Jensen's suggestion to pull out of the project, see Kieler. According to Keld Danø, Olsen was for the Rockefeller centre, but in his capacity as chairman of the Society, he had to agree with Bang and the Executive Committee that the right solution would be for the Society to build its own research centre at the Finsen grounds. In his annual report to the Head Board (1986), Olsen spins the collapse of the Rockefeller plans into the logical consequence of something positive: the financial expansion and success of the Society and the anti-cancer cause.
Prof., MD, Jens F. Rehfeld	- The Clinical-Chemistry Dep. CL, Rigs-hospitalet. - MRC-member (until 1983) - Member of the working group behind the Rockefeller Centre Report	"State"/Rigs-hospitalet	X (minority model)	-	Rehfeld supported the proposal of a cell biology centre at the Rockefeller Institute. He did not want this centre to include the clinical units of the Finsen Institute, as the centre was to focus on basic cell biological problems. Proposed that the centre should be financed in part by national biotechnology program and by the income of patents from the researchers in the centre (in particular Lennart Olsson). Proposed that the centre should have a leader appointed by the Rigshospitalet and governed by statutes written by the MRC and the NSRC. As an MRC member, he was interested in creating the best possible organisational and financial structures for biomedical research. The reason why he backed the minority model can be that he believed it to be the one most likely to be established from a financial point of view – even without additional support from the Ministry of Education.

The Cancer Centre That Never Was

Maj. Cons. Mikael Rørth	-The Oncology Department ONB, the Finsen Institute - Member of the working group behind the Rockefeller Centre Report	"State"/The Finsen Institute	X (majority model)	-	The clinician Rørth liked the Rockefeller model because it brought bench and bedside closer together (clinical, exp.- and epidemiological research and treatment). Also, he may have hoped that the Society's involvement in a centre meant more funds for clinical research, and he wanted the Society's research units to be integrated in Rigshospitalet where he worked.
Prof, MD, Morten Simonsen	-Dep. For Exp. Immunology, Copenhagen University - MRC member (1982-1986). - Member of the working group behind the	"State"/the MRC	X (minority model)	-	See, Jens Rehfeld.

The Cancer Centre That Never Was

	Rockefeller Centre Report				
Dean Eva Steiness	-The Medical Faculty, Copenhagen University -Member of the working group behind the Rockefeller Centre Report	“State”/ Copenhagen University	X (majority model)	-	She wanted a centre but did not want it to disturb the organisation of the Medical Faculty or take space away from its other research fields and activities. Wanted to transfer the Society’s research units to the Medical Faculty of Copenhagen University (academic management).
Research professor Lennart Olsson	Rigs- hospitalet	-	(X) (minority model)	-	As a research professor, he had agreed to donate the profits of his patents to the cell biology centre, as proposed by the minority of the working group (S.O. Andersen, Rehfeld, Simonsen). This minority model assigns Olsson a prominent place in the centre, and Olsson may for this reason have been interested in establishing this particular type of centre.
Research professor Lars Inge Larsson	Aarhus University.	-	-	-	Not explicit in this chapter.
Dr. Jørgen Kieler	Director of the Fibiger Institute	Society	-	X	He and Dr. Ole Møller Jensen informed the Society’s Executive Committee that the Rockefeller plans did not fit the needs of the Cancer Registry and the Fibiger Laboratory which had expanded their scientific activities considerably. His Fibiger Institute had been moved several times in the 1960s and 1970s, and Kieler claimed the many moves had damaged the publication

The Cancer Centre That Never Was

					intensity and work of his staff. In spite of this, Kieler claimed to support the idea of a comprehensive cancer centre albeit in better and larger physical settings until the Cancer Society's wealth supported his institute's rapid expansion beyond the physical capacity of the planned Rockefeller centre, at which point he advised the Society's management to abandon the Rockefeller plans.
Dr. Henry Kaplan	Stanford Medical School (collaboration partner of Lennart Olsson)	-	-	-	-
Dr. Keld Danø	Head of Finsen Laboratory	State/Rigs-hospitalet	X		Danø was not part of the working group that prepared the Rockefeller plans or of the group that negotiated them. Nevertheless, he was a potential inhabitant in the new centre and managed to get his personal statement about the two centre models attached to the report to the MRC, and the ministries of education and interior. He wanted the Fibiger Institute, the Finsen Laboratory and the Cancer Registry to form the core of a comprehensive cancer centre at the Rockefeller Institute (close to the hospital's oncology wards), and this centre should be organised as a single unit with one common management (consisting of researchers, not lay representation from the Society). He did not want a management with representatives from each involved organisation (as proposed in the majority model), because he feared that the conflicting aims and interests of these organisations could end up preventing the centre from functioning as an entity.
Ib Terp	Head of the State's	The State	-	-	Was quoted in a newspaper article that the MRC and the NSRC had deliberately and gradually downsized their allocations for cancer research because of the wealth of the Cancer Society. His

The Cancer Centre That Never Was

	Research Secretariat				interests regarding the cancer centre is not explicit.
Dr. Ole Møller Jensen	-Head of the Danish Cancer Registry - Member of the Society's Scientific Council (1982-1990)	The Society	-	X	He and Kieler informed the Society's Executive Committee that the Rockefeller plans did not fit the needs of the Cancer Registry and the Fibiger Laboratory, which had expanded their scientific activities considerably.
Bertel Haarder	Minister of Education (1982 – 1993)	State/The Ministry of Education	(X)	-	In response to the allegations made in the press by researchers, the Cancer Society and journalists that the “State” did not contribute enough to the fight against cancer, Haarder argued that the public authorities had other equally important research fields to support, and that the State already funded cancer research through the MRC, the NSRC and the core budget of its hospitals and universities. Haarder supported the Rockefeller plan on the condition that it would not require additional funds from the Ministry of Education and the Ministry of the Interior, as this would conflict with the formal institutions/financial policy set by government for non-growth of public expenditures.
Britta Schall Holberg	Minister of the Interior (1982-1986)	State/The Ministry of the Interior	(X)	-	Much like Bertel Haarder.
Preben Larsen	Head of the State's	State/The Ministry of	X	-	Larsen had to find room for a potential cancer centre → the Rockefeller Institute. Larsen led the negotiations for the Rockefeller centre and was frustrated over the collapse of the plans

The Cancer Centre That Never Was

	Building Directorate	Education-State's Building Directorate			when the Cancer Society did no longer want to be a part of the project in 1986.
J.J. Pindborg	-Dep. For Pathology and Medicine, Copenhagen Dentistry School. -New chairman of the MRC (1985-1987) (MRC member 1984-1987).	State/MRC	X	-	As chairman of the MRC, Pindborg wanted to establish the best possible financial and organisational structures for biomedical research. If the wealthy Cancer Society was involved in the plans, the financial latitude of the project would be greater than what the research councils could manage alone.
Niels Hammer-Jespersen	Rigshospitalet	State/Rigshospitalet	X	-	Not explicit in this chapter
Henning Ziebe	Journalist from Berlingske Tidende,	-	-	-	-

Chapter 5 The Finsen Centre

Path dissolution

At first glance, the plans for the Finsen area lent new hope that Denmark would finally put the 40-year-old dream of a national cancer centre into practice. In theory, the establishment of a centre would bring about new and better lab facilities for selected research groups, and perhaps a pipeline to increased (private) funding, and a symbolic “institutionalisation” of cancer research in the form of a large scale physical entity devoted to this activity only. As such, the establishment held several advantages for the public and private cancer researchers, and at the same time the centre served the Society’s new strategy to coordinate its own research units and protect its capital against the inflationary pressure of the time through investments in the real estate of the Finsen campus. The Society’s strategy would only succeed, however, with increasing societal returns if the charity’s defection from the Rockefeller plans did not evoke public anger or doubt about the organisation’s commitment to the anti-cancer cause vs. its corporate growth interests. And this was difficult. Still the main objective of establishing a centre – the coordination of science – remained strangely absent from the debates as no one touched upon the matter of centre content. And whereas the Society used the idea of the cancer centre as leverage to obtain their goals, its critical counterparts used it as leverage against the Society: it had become a means to ensure influence rather than the objective of a centre to coordinate the cancer field. The path of the cancer centre soon dissolved beneath the feet of the cancer community.

The Cancer Society proposed a cancer centre at the Finsen campus after the collapse of the Rockefeller plans. And it was quite different from what the Rockefeller centre had been about. The Rockefeller centre was supposed to be a state-owned but joint public-private project, whereas the new centre was a private venture of the Danish Cancer Society. And because the clinical oncology departments of the Finsen Institute were about to be moved from the Finsen campus to Rigshospitalet on Blegdamsvej, the scientific profile of the proposed centre was also different. As the director of the Fibiger Institute – Jørgen Kieler – noted in his annual report, this changed the very status of the centre itself:

The Cancer Centre That Never Was

The dream of a “Comprehensive Cancer Research Centre” covering both clinical, epidemiological, and experimental cancer research had to be abandoned, but this does not exclude the establishment of a Center for Experimental and Epidemiological Cancer Research. The Fibiger Institute is very much in favour of such a centre which primarily should include the Fibiger Institute, the Finsen Laboratory, and the Cancer Registry. But other laboratories might find place in the buildings that are being evacuated by the clinical departments of the Finsen Institute.⁵⁰⁹

The centre was no longer “comprehensive”, as it lacked cancer treatment and purely clinical cancer research. Instead, it was now a “cancer research institute/centre”, and Kieler appears to have been one of the few Danish cancer researchers who cared about the fact that the new centre no longer resembled Engelbreth-Holm’s dream from 1945 or the outlined comprehensive cancer centres of the Kjeldgaard Report from 1981. He hoped that the new centre would still be able to collaborate with clinicians from Rigshospitalet and the Medical Faculty of Copenhagen University as they were less than 2 miles away⁵¹⁰. From a scientific point of view, the new plans were not as likely to bridge the gap between bench and bedside as the Rockefeller solution had been, and it was far from certain that all the former collaboration partners would be interested in the new project.

Nevertheless, the major power broker of the cancer community was indeed interested and able to finance the entire thing, and this made the opinion of the other collaborators almost irrelevant. As mentioned in the previous chapter, the management of the Danish Cancer Society was interested in buying parts of the Finsen campus and it wanted to coordinate its own research units there⁵¹¹. In order to do so, the Society would have to invest heavily in research buildings, and this was a deliberate financial strategy to protect the organisation’s growing capital from the inflationary pressure of the time. By establishing a cancer research centre at the acquired property – consisting mostly of its own research units – the Danish Cancer Society would get an added bonus in the form of *publicity*. And this was a significant bonus, as a survey from 1985 had revealed that the Danish public knew surprisingly little about the Society’s research activities. Only 3% were aware that the Fibiger Institute was run and owned by the Danish Cancer Society⁵¹². 18% believed this to be true for the Cancer Registry, while a total of 21%

⁵⁰⁹ Fibiger-Institute (1987). *Annual Report 1987*. Copenhagen, The Danish Cancer Society, p. 8.

⁵¹⁰ Fibiger-Institute (1986). *Annual Report 1986*. Copenhagen, The Danish Cancer Society, p. 7.

⁵¹¹ The Danish Cancer Registry had outgrown its premises at Trekronergade in Copenhagen, and needed to be moved elsewhere. By purchasing more buildings at the Finsen campus, the Society was able to coordinate the registry with its Fibiger Institute and the state-owned Finsen Laboratory which were both already present on campus.

⁵¹² Meeting minutes of the Society’s research managers November 12th 1985. *Personal papers of Jes Forchhammer, (Bagsværd)*, p. 5.

The Cancer Centre That Never Was

were aware of who owned the cancer research institute in Aarhus. At the same time, approximately 50% of those polled were under the impression that all of these institutes were run by the State⁵¹³.

This was of course unfortunate for the private cancer charity that had declared a research-based war on cancer, and needed the public's voluntary contributions in order to exist and run its research units. If the public believed the only entirely cancer-orientated research institutes in the country to be publicly financed, why would they bother supporting the private Cancer Society? However, the management of the Society began referring to the proposed new cancer research centre as "The Danish Cancer Society's Research Centre" in order to solve the problem⁵¹⁴. The new centre would move the Society's research institutes closer together and make the Society appear as a strong unit. Together with the State-owned Finsen Laboratory, these institutes would form the very core of a new cancer research centre, which would in time be able to accommodate other research groups as well⁵¹⁵. If put into practice the centre would appear a powerful and predominantly private initiative – and this was good publicity!

But whereas the Society was trying to make the public aware of the value of its research institutes, the Society's International Scientific Advisory Committee (ISAC) was struggling to make changes within them. The ISAC had made annual site visits to the Fibiger Institute and the cancer research institute in Aarhus for several years, and their well-meant suggestions for structural changes were not always welcomed by the Society's scientific staff. Some of the recommendations had been followed – e.g. the split-up of the cancer research institute in Aarhus – while some had been ignored by the management. The ISAC had had to repeat its recommendations several times to no avail. In their 1987 report to the Danish Cancer Society, the ISAC members therefore decided to focus on more general issues of Danish cancer research instead. They were concerned with the slow rate of progress of some aspects of the Fibiger Institute's research program, but they did not find themselves capable of assessing the performance of the Society's research unit in relation to the rest of Danish cancer research without a national frame of reference⁵¹⁶. The ISAC members thus wanted the Society to use the planning of the new research centre as a chance to take stock of its research and structure:

⁵¹³ Ibid.

⁵¹⁴ The chairman's report to the Head Board (1988). *Personal papers of Ole Bang, (Copenhagen)*. p. 9.

⁵¹⁵ Fibiger-Institute (1988). *Annual Report 1988*. Copenhagen, The Danish Cancer Society, p. 1.

⁵¹⁶ ISAC report to the Danish Cancer Society, October 1987. *Personal papers of Jes Forchhammer, (Bagsværd)*. p. 3.

The Cancer Centre That Never Was

The ISAC therefore suggests that a global review of the cancer research supported by the Society be undertaken by an international review committee. The size of Denmark makes such an exercise feasible and indeed particularly important for a small country; a similar approach has been adopted by the Natural Science Research Council in Sweden. The ISAC is of course prepared to participate in this process and it believes that a further isolated review of the Fibiger Institute is not necessary before this comparison has been made. The review should provide a useful basis for the development of a strategy for the future development of the Society's research program as a whole. The review would be particularly timely in the light of discussions about the comprehensive cancer centre, the impending retirement of Dr Kieler, and the need to rationalise some areas of research, for example the AIDS program.⁵¹⁷

The proposed "global review" of all Danish cancer projects would have been more extensive than the survey presented in the Kjeldgaard Report. This report had based its findings on questionnaires and bibliographical citation studies, but the survey proposed by the ISAC would entail a review of each individual cancer research project and program. It would no doubt have been a good idea to evaluate the entire Danish cancer research effort with the aim of restructuring and coordinating the field on an overall level before establishing the new centre. In this way, the need for a formal coordination of the country's cancer efforts and the need for a cancer research centre could be evaluated. Such a survey would identify and benchmark the particular Danish strengths in the very diverse cancer research field and point to those which were most likely to bring about the breakthroughs and socioeconomic effects from the war on cancer which had previously been stated as potential outputs of a centre initiative – as put forward by the Kjeldgaard Report. And according to the Washington conference on planning for cancer centres (chapter 3), only a rationally selected and shared research program would lead to rational identification of relevant research groups for a centre.

But although the proposal of a "global review" of Danish cancer research was discussed in the Scientific Council it was never put into practice, and some of the Society's researchers were even beginning to question the purpose and benefit of the ISAC itself⁵¹⁸. It would seem that the committee was no longer considered an authority to be reckoned with, as the Society had already implemented the structural changes it wished to implement (like the budget reform, chapter 3) , and because the ISAC was merely repeating its other recommendations year after

⁵¹⁷ Ibid., p. 4. The ISAC members and the Danish cancer researchers did not seem to work with such clearly defined concepts of what a cancer centre should be as the UICC and used the term "comprehensive" more loosely than the UICC in reference to a larger centre with a broad spectrum of activities.

⁵¹⁸ Jes Forchhammer's meeting minutes of the Scientific Council January 1st 1988. *Personal papers of Jes Forchhammer, (Bagsværd)*.

year, it proved relatively superfluous⁵¹⁹. Like the Rockefeller centre, a rational and survey based content/research program for the Finsen centre did not seem to be of primary interest to the Society (neither to its researchers or its administrators) which at the time was experiencing internal cultural clashes that could potentially lead to a less than smooth facilitation of the planned Finsen centre, as will be evident in the following.

5.1 Chimeras, cultural clashes and cracks in the centre's foundation

To some extent the ISAC was unnecessary as its advisory functions were assigned to the Scientific Council (the private pendant to the State's research councils) and a new scientific department in the Society. In 1987, the Society's Executive Committee reorganised its science administration by establishing a "Scientific Department" with the official purpose of assisting the Scientific Council with its increasing workload (e.g. the preparatory processing of grant applications) and to aid the central management on scientific planning and the launching of larger research programs⁵²⁰. The chairman of the Scientific Council, physician and Aarhus University professor, Dr Erik Amdrup, was appointed head of the new department for a two-year period until his professorship in Aarhus ended. In addition to these official functions of the department, Amdrup mentioned another in his memoirs:

The employees at the research units and those in the other departments (management, finance, collection, education, patient support, and membership departments) had very different educations and working cultures, and apparently not much in common apart from their employer. From experience it is known that this can be the cause of a negative atmosphere.

It was thus also the task of the head of the Scientific Department to create a stronger link and a greater understanding between the researchers and the employees of the head office.⁵²¹

Amdrup himself was an experienced physician and medical researcher, and his new administrative job was to mediate between his peers and management (or as he calls it, the administrative), the work of which he understood through years of committee work. He and his department were the necessary buffer zone to prevent the heterogenous groups of the cancer charity from clashing. However, it was not easy to be a researcher involved with research administration on this level, and the cultural differences within the Society were far from eliminated with the establishment of the new department. The prominent and senior member of

⁵¹⁹ Meeting minutes of the Scientific Council April 17th-18th 1989. *Personal papers of Jes Forchhammer (Bagsværd)*.

⁵²⁰ Meeting minutes of the Scientific Council November 16th-17th 1987. *Personal papers of Jes Forchhammer, (Bagsværd)*. p. 3.

⁵²¹ Amdrup, E. (1998). Som jeg så det - en kirurgs tilbageblik. Danmark, Gyldendal, p. 191.

the Society's scientific staff, Jørgen Kieler, had previously lashed out at Ole Bang and the Executive Committee for implementing the budget reform, (see chapter 3). Back then, he had not only lashed out at Ole Bang, but also at professors Steen Olsen and Niels Ole Kjeldgaard – a medical and a basic science researcher, respectively – by trying to undermine their characters and professional competences. Much like Amdrup, they too had to unite a scientific and an administrative interest in their voluntary and honorary jobs in the Executive Committee, and they were criticised by conservative voices – such as Kieler – for not being true to their roots in the scientific community because they now adopted the aims and values of the Cancer Society as a modern business in capacity of their membership of its management. The new chairman of the Society, Bent Harvald, was another example of a medical researcher in an administrative position, and in some sense he and the others were all “chimeras” in exposed positions.

In addition to this, only the director of the Society (Ole Bang) was paid for the work. The members of the Scientific Council, the Executive Committee and the Head Board were all volunteers who had other jobs and worked for the Society in their spare time. The committee work therefore offered no financial bonus for people like Amdrup, Steen Olsen, Niels Ole Kjeldgaard, and Bent Harvald, whose views reflected a medical or basic scientific logic along with the private business logic of the Cancer Society meaning that they were open to different kinds of attacks as compared to persons reflecting only one of these. The most conservative voices of the scientific staff expected a researcher in an administrative post to promote the interest of scientists only, as Bent Harvald experienced when the Executive Committee decided to split the Fibiger Institute into five sub-departments with a new form of management in 1989⁵²²:

70-year-old Jørgen Kieler was about to retire, and the Executive Committee saw this as a chance to restructure the Fibiger Institute. When Kieler was director, the institute was managed in a patriarchal and hierarchical fashion that revolved around the director, and this was now considered a bit old-fashioned and replaced by an oligarchic board of senior researchers and the heads of departments⁵²³. As mentioned in chapter 3, Niels Ole Kjeldgaard and Ove Sten-Knudsen had criticised the Fibiger Institute for not implementing a more democratic mode of governance, as had become custom at the universities. Jørgen Kieler, on the other hand, had made it part of his lifework to protect this traditional hierarchical administrative structure at the

⁵²² Biannual report of the Chairman (December, 1989). *Personal papers of Ole Bang, (Copenhagen)*. p. 21-22.

⁵²³ Ibid. p. 22.

The Cancer Centre That Never Was

Fibiger Institute and the fruitful research milieu he believed to be a direct consequence thereof⁵²⁴.

For this reason, Kieler was highly affected by the central administration's decision to reorganise his institute the very moment he retired, and he was not going to take it lying down. The divergence between him and the Society's administration – and Ole Bang in particular – had gained new strength through the planning of a symposium for the 50th anniversary of the Fibiger Institute in June 1989. Years of less amicable relationship between Bang and Kieler were put on display, as the two disputed over a minor administrative matter and accused each other of wrong-footing the heads of research and of sabotaging collaborative efforts.⁵²⁵ When asked by the new Chairman, Bent Harvald, if he was interested in a special retirement reception, Kieler answered that he wanted to let this dispute with Bang (and thus the management whose decisions Bang had implemented) mark his farewell instead. In a letter to Harvald he described the situation in the following way:

This would be in harmony with the unhappy experiences we have had during the last 8 years, and which should not be forgotten or camouflaged. On the contrary it should serve as inspiration for you and others to carry through radical reforms for the improvement of the relationship between the researchers and the political and administrative management. (...). I wish you good luck with your work for the Danish Cancer Society. I get dizzy at the thought of the extent of your tasks, but at the same time I feel relief to leave it to others to defend the interests of research.⁵²⁶

Kieler's views (that an institute's director alone ought to be in charge of making decisions regarding its structure and research profile) mirrored a medical logic that was juxtaposed to both the basic scientific and the private business logic of the members of the Society's management with regards to how research should be administrated. Kieler obviously saw it as his and any other researcher's job to defend the autonomy of (medical) science against excessive administration, and he feared for the future of the Fibiger Institute, now that he was no longer there to protect it. And the new structural changes at the Fibiger Institute must have confirmed his worst fears. As a consequence, he was glad that Bent Harvald had replaced Steen Olsen as chairman, and hoped that Harvald would now be able to balance out the power of the "triumvirate", (see chapter 3). However, it would seem that his hopes had been too high:

⁵²⁴ Letter from Jørgen Kieler to Bent Harvald October 2nd 1989. *Personal papers of Jes Forchhammer, (Bagsværd)*.

⁵²⁵ Letter from Jørgen Kieler to Bent Harvald June 19th 1989. *Personal papers of Jes Forchhammer, (Bagsværd)*.

Letter from Ole Bang to Jørgen Kieler June 14th 1989. *Personal papers of Jes Forchhammer, (Bagsværd)*.

⁵²⁶ Letter from Jørgen Kieler to Bent Harvald July 6th 1989. *Personal papers of Jes Forchhammer, (Bagsværd)*.

The Cancer Centre That Never Was

My hopes that you would correct the wrongs committed by Steen Olsen & Co. are fading. The structural changes of the Fibiger Institute, which Ole Bang is now implementing, must have been approved by you and you are thus contributing to destroy all that my employees and I have spent many years creating. For my part, it is my lifework. You can probably understand my disappointment and indignation, but even your predecessor must feel uncomfortable. His declared goal was formerly to concentrate and coordinate. Now the Cancer Research Institute in Aarhus has been closed, and subsequently the Fibiger Institute is next in line to be split, and sooner or later it will be time for the Cancer Registry as well. And at the same time there is much talk of a large cancer research centre. I wonder if this talk will not be as phoney as the talk of coordination, and for that matter the talk of the wonder of molecular biology. You have lost all credibility, and the Cancer Society is in its worst ethical crisis ever. I think you should consider your role in this game once more and very thoroughly.⁵²⁷

Bent Harvald thus experienced the challenges of being a researcher in an administrative position who also had to protect the interests of the Society as a business. To the perhaps most traditionally-minded representative of the scientific staff, Jørgen Kieler, the actions of Steen Olsen and Harvald were considered to be almost worse than those of Ole Bang. Whereas Bang came from the private corporate sector and acted according to the private business logic and habitus affiliated with it, Kieler clearly expected something different from the two researchers. To Harvald, this complaint must have been an omen of what was to come and proof of the thankless tasks of a “chimera”, a strange living being pieced together by two different professional groups with often conflicting and interpenetrating interests.

The management of the private Cancer Society had to assign a high priority to publicity value, asset management, and quality/efficiency analysis of their products – be that cancer research at their research units, public education etc. – in order to spend their collected funds in the best possible manner. The charity had to pin-point any non-cost-efficient (research) activities and organise them more rationally, and this was not always in accordance with the wishes of the units’ medical researchers like Kieler who as heads of their departments wanted to decide for themselves. For instance, the Kjeldgaard Report had shown that the publication rate and impact factor of the researchers and work the done at Kieler’s Fibiger Institute had not been as good as at the hospitals and the universities. The Fibiger Institute was operated and funded by the Cancer Society, and in this respect the work done at the Institute was a product of the private cancer organisation. If its products did not have the same or better quality than the university’s and the hospitals’, the cancer organisation thus had to change the link in the production that lessened this quality.

⁵²⁷ Letter from Jørgen Kieler to Bent Harvald October 2nd 1989. *Personal papers of Jes Forchhammer, (Bagsværd)*.

The Cancer Centre That Never Was

The Kjeldgaard Report had suggested that such a change could be made by implementing a budget reform, and as mentioned in chapter 3 this reform deprived the directors of the Society's research units of influence over the units' research profile. Because of the budget reform, the directors no longer had the power to dictate the content of the research program, as each individual project had to apply for funding through the peer review processes of the Society's Scientific Council and the State's research councils in free competition with other projects. Also, if the Society found that the very structure of the institutes was impeding its "product" quality, it would want to make changes. If a department at an otherwise well-functioning institute worked on scientifically dead-end project lines, it made sense to shut them down and spend the money on something better. At least, it made sense from the point of view of the businessman Bang but also basic scientists Kjeldgaard, Sten-Knudsen, and the ISAC members – it was after all the Kjeldgaard Report and the ISAC who had suggested the changes in the first place – and who had argued that only the best and peer reviewed research projects should be funded.

The matter thus represented a clash between Kieler's medical logic on the one hand and Bang's business logic and a scientific logic on the other. Although Kieler did not succeed in preventing the restructuring of his institute and had to retire, he did not give up the fight against the administration of the Society. As his protest was only met with silence by the Executive Committee, he wrote and published a special anniversary history of the Fibiger Institute in which he did not conceal his attitude towards the administrative and political management⁵²⁸. He forwarded this writing to all the members of the Head Board and the Scientific Council, and although it was far from all of the scientific staff who were in direct conflict with the management – it was more or less only Kieler – it became clear to all that the Society suffered from intramural differences of opinion. And even the tiniest crack in the foundation of the Society must have been very unwelcome, when the Society had just defected from the Rockefeller plans to pursue its own Finsen plans in order to continue its new corporate strategy and utilisation of the existing formal and informal institutions (the government's unpopular financial policy for the hospital sector and the public's response to this) which was paying off in the form of increasing societal returns and charitable donations.

As mentioned in the previous chapter, the defection from the Rockefeller plans and the commitment to a new and business inspired strategy to invest in real estate and harvest the PR of

⁵²⁸ See, Kieler, J. (1989). The Fibiger Institute 1949-1989. Copenhagen, The Danish Cancer Society.

having its own research units had transformed the modest and physician dominated charity into a modern business (albeit non-profit). And this change and defection would only succeed continuously as long as no one – and especially not the public – doubted the Society's intentions and ability to pursue its anti-cancer cause. And time would tell that the Society had not heard the last of Kieler's criticism, as he would closely monitor the organisation's plans to coordinate Danish cancer research through the planned cancer research centre in the 14000 m² large Finsen buildings⁵²⁹.

5.2 The negotiation table revisited

The internal cultural clashes in the private Society mirrored a similar reaction and development in the public hospital sector. As mentioned in chapter 4, the government's attempts to control the growth of public expenditures and the subsequent prioritising within a set economical framework was increasingly unpopular with the public who had come to expect the availability and abundance of public health care services. In order to signal the importance of the hospital/health care sector in times of economical short commons, the government established a Ministry of Health (previously a domain of the Ministry of Education) in 1987⁵³⁰. However, at the same time the mantra of the government seemed to be to increase productivity and efficiency at the hospitals through the means of the market oriented tool New Public Management, which the politicians had seen used in other countries such as Sweden, New Zealand and England in order to make public hospitals act and perform as efficiently as private businesses⁵³¹. The introduction of New Public Management gave rise to restructurings at the hospitals which instead of separate medical, patient care, and administration hierarchies were now given centralised administrations led by – most often – non-medically but economically or politically trained directors (the so-called DJØF professional group)⁵³². The former dominance of the medical profession in health care policy making seemed to be over⁵³³, and the new directors made use of the New Public Management tool to accommodate the governmental pressure to economise health care.

⁵²⁹ Fibiger-Institute (1989). *Annual Report 1989*. Copenhagen, The Danish Cancer Society, p. 7.

⁵³⁰ Jacobsen, K. and K. Larsen (2007). *Ve og Velfærd - Læger, sundhed og samfund gennem 200 år*. København, Lindhardt og Ringhof, p. 467.

⁵³¹ Ibid., p. 480.

⁵³² Ibid., p. 481.

⁵³³ Haave, P. (2006). "The Hospital Sector - a four county comparison of organisational and political development". *The Nordic Model of Welfare*. N. F. Christiansen, K. Petersen, N. Edling and P. Haave. Copenhagen, Museum Tusculanum Press: 215-242, p. 238.

The Cancer Centre That Never Was

The main burden of the government's financial policy thus fell on the hospitals which in the name of rationalisation were subjected to a reduction of the number of hospital beds, reduction of the catalogue of services etc. The medical profession of the hospitals learned to live with certain rationalisation measures and restructurings – such as each hospital department now having a chief MD – but the introduction of the overall centralising directions and the influx of the DJØF professional group (law, economics, political studies) and their politically synchronized contract and performance management led to scepticism and antagonism⁵³⁴.

The transformation of Danish public hospitals throughout the 1980s was modelled after the strategies of private businesses and market conditions in order to ensure agility and efficiency on a par with competing private businesses (a managed competition policy) and it scared many members of the medical community who feared that the public hospital sector would be slowly privatised and turned into organisations in which bureaucrats rather than medical professionals made the important calls – perhaps with fatal consequences for the patients⁵³⁵. The transformation of the modest and physician dominated Cancer Society into a modern business with corporate strategies must have been equally ominous for public cancer researchers, who increasingly depended on funding from this major powerbroker in the cancer community. Planning for a new and privately dominated cancer centre by the end of the 1980s has to be seen in the light of these parallel developments in the private and public part of the cancer community. Their largest funding body started acting less and less like the modest and physician led foundation it once was, and more and more like a private business on market terms.

From 1988 and onwards, the Danish Cancer Society was in dialogue with the State's Building Directorate Preben Larsen about the conditions for buying the building plot between Ndr. Frihavnsgade (where the Fibiger Institute was placed) and the former Finsen Institute⁵³⁶, see figure 5-1. The negotiations were kept in strict confidence as they had to do with significant amounts of money and many different interests. On January 11th 1989, the MRC initiated a meeting for representatives of the Society, the MRC, Rigshospitalet, and Copenhagen University⁵³⁷. The purpose of the meeting was to inform the public research institutes of the Society's centre plans and to find out whether or not they were interested in participating in the

⁵³⁴ Jacobsen, K. and K. Larsen (2007). *Ve og Velfærd - Læger, sundhed og samfund gennem 200 år*. København, Lindhardt og Ringhof, p. 481-482.

⁵³⁵ Ibid., p. 483.

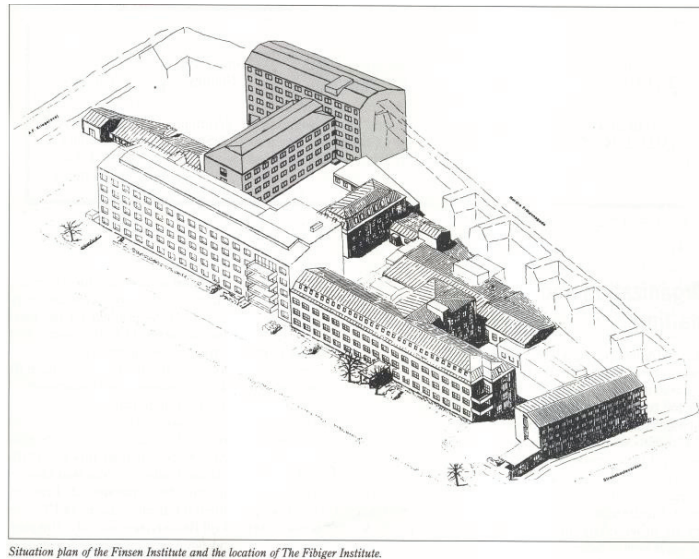
⁵³⁶ Biannual Report of the Chairman, December 1988. *Personal papers of Ole Bang*, (Copenhagen). p. 22.

⁵³⁷ Meeting minutes of the MRC, January 11th 1989. *Archives of the Danish Cancer Society*, (Copenhagen). P. 1.

The Cancer Centre That Never Was

project⁵³⁸. The proposed research centre was large enough to accommodate both of the Society's own research units, the Finsen Laboratory, and a number of public cancer research groups. Lawyer Erik Vraa from Rigshospitalet opened the meeting by stating that although the ownership of the Finsen grounds had not yet been established, it was his understanding that the Ministry of Finance and the Ministry of Health were positive towards the cancer research centre initiative⁵³⁹.

Figure 5-1 Drawing of the Finsen Park



Situation plan of the Finsen Institute and the location of The Fibiger Institute.

Note:The two adjacent and darkened buildings in the top of the drawing is the Fibiger Institute which is owned by the Cancer Society. The other buildings used to house the Finsen Institute before the clinical departments of this hospital were moved to the Rigshospitalet. The Cancer Society was interested in buying all of these buildings.

Source: The Annual Report of the Fibiger Institute 1987.

The ownership of the Finsen grounds was very important. As of yet it had not been established whether the area rightfully belonged to the Ministry of Health or to Rigshospitalet in specific, and until this issue had been established the Danish Cancer Society would not be able to acquire these quarters. Ole Bang attended the meeting on behalf of the Society, and he stated that the proposed centre would have to be owned by the Danish Cancer Society and that the Head Board had insisted on naming it “The Danish Cancer Society’s Research Centre”⁵⁴⁰. Basic cancer researcher Elisabeth Bock, who represented Copenhagen University, was worried about the

⁵³⁸ Meeting minutes of the Scientific Council January 12th 1989. *Personal papers of Jes Forchhammer*, (Bagsværd), p. 3.

⁵³⁹ Meeting minutes of the MRC, January 11th 1989. *Archives of the Danish Cancer Society*, (Copenhagen). p. 1.

⁵⁴⁰ Meeting minutes of the MRC, January 11th 1989. *Archives of the Danish Cancer Society*, (Copenhagen), p. 1 & 3.

The Cancer Centre That Never Was

minimal level of influence which external research groups would be given in an entirely Society-owned research centre. So was Aarhus University professor in anatomy and MRC member Arvid Maunsbach, and he therefore preferred the centre to be run jointly by the State (i.e. the University, Rigshospitalet, and the MRC) and the Society⁵⁴¹. According to him, it would perhaps be best to use the management mode proposed by the majority of the MRC working group during the planning of the Rockefeller centre.

Erik Vraa from Rigshospitalet took it a bit further and suggested that the centre should be made a self-owning institute. This did not, however, go down well with Ole Bang and the Society's accounting manager Mads Bjerre, and they insisted that the most realistic solution to the problem was to have *one* single owner of the centre (the Society) while the other parties could rent their way in⁵⁴². This would give the Society the power to negotiate with each and every interested research group and to make sure that the centre was operated entirely on the Society's terms and yielded the necessary PR for the organisation. The two Society representatives acted in accordance with the private business logic that had come to characterise the charity's actions and strategies for asset management and publicity⁵⁴³.

Dr Jørgen Rygaard of the pathology department at the Copenhagen Municipal Hospital attended the meeting on behalf of the MRC, and he argued that it was "unrealistic to believe that the State would start a new cancer research centre", and that he fully understood the Society's need for making itself more "visible"⁵⁴⁴. Rygaard argued that he as a member of the State's Medical Research Council did not believe that the State⁵⁴⁵ – and here he probably referred to the Ministry of Education, the Ministry of the Interior, and the Ministry of Health – had intentions of starting a new cancer research centre, and that the centre would only come about if the Society paid for the entire venture. In this way, he indicated that it was only fair if the power and influence of the Society was proportionate with the money the organisation invested in the centre. As a former employee and primus motor of the Society's Information Department in the

⁵⁴¹ Ibid. p. 2.

⁵⁴² Ibid. p. 3.

⁵⁴³ Now that the changes suggested by the Kjeldgaard Report and the ISAC had been implemented (such as the budget reform, the split up of the Aarhus Research Institute etc) – which were all the result of a scientific logic – the Society was being run as a private business and adopted Bang's business logic in order to survive under the unfavourable market conditions.

⁵⁴⁴ Meeting minutes of the MRC, January 11th 1989. *Archives of the Danish Cancer Society, (Copenhagen)*, p. 3.

⁵⁴⁵ As mentioned in the previous chapter, the actors often referred to the "State" without specifying which ministries, councils, or agencies, they were actually talking about.

The Cancer Centre That Never Was

late 1970s, he clearly understood the charity's need of publicity – of being visible to the man on the street.

His views were not shared by the other representatives of the MRC, however. MRC member of Copenhagen University's Department for Human Pathophysiology Dr Jørn Giese argued that the State was in grave need of "visibility" as well, and that a joint State-Society centre would make the public know that the State⁵⁴⁶ took its responsibility for cancer research very serious⁵⁴⁷. A representative of Rigshospitalet, oncologist Dr Mikael Rørth, pointed to the fact that the essential discussion was not about management and ownership. According to Rørth, it was clearly more important to find a scientific foundation for the proposed centre, and all parties were inter-dependent on this matter. In Rørth's opinion, the present proposal for a cancer research centre was the last chance for such large-scale collaboration, and it was time to put it to good use⁵⁴⁸. Nevertheless, the parties never reached an agreement on either the management mode or the scientific content/program of the new centre, and they decided to await a decision on the ownership and sale of the Finsen grounds before further discussions could take place. Ole Bang, managed to put it on record that the name of the centre was very important to the Society. But when the Society's representatives gave an account of the meeting to the Head Board and the Scientific Council, they neglected to mention the difficulties discussing an administrative and political management of the new centre. According to Ole Bang, none of the public parties had pledged to participate in the centre, but they had all expressed a strong interest in the centre and pushed for a centre to be established this time around⁵⁴⁹. He stated that the MRC, for one, was very interested in moving future cancer-related research professorships into the centre, but although the MRC was willing to allocate discretionary funds for this activity, it was not willing to pay rent for the laboratory space that the research professors would occupy⁵⁵⁰.

This declaration is *not* reflected in the meeting minutes of the MRC. Furthermore, the MRC did, at this stage of the negotiations for a centre, perhaps not have as great an interest for placing its research professors in the centre as was the case during the earlier Rockefeller negotiations. As

⁵⁴⁶ Here Giese probably uses the term "State" to refer to the Ministry of Health and the Ministry of Education, as the Ministers heading these institutes were directly involved in the negotiations for the centre, and particularly Bertel Haarder had previously been accused by Steen Olsen and Niels Ole Kjeldgaard of not supporting the anti-cancer cause (in the press mediated discussion of the conclusions of the Kjeldgaard Report in 1982).

⁵⁴⁷ Meeting minutes of the MRC, January 11th 1989. *Archives of the Danish Cancer Society, (Copenhagen)*, p. 3.

⁵⁴⁸ Ibid.

⁵⁴⁹ Biannual Report of the Chairman, April 1989, *Personal papers of Ole Bang, (Copenhagen)*, p. 14.

Jes Forchhammer's notes from the Scientific Council meeting January 12th 1989, *Personal papers of Jes Forchhammer, (Bagsværd)*.

⁵⁵⁰ Biannual Report of the Chairman, April 1989. *Personal papers of Ole Bang, (Copenhagen)*. p. 15.

The Cancer Centre That Never Was

for the MRC's aversion against paying rent, it was not normal procedure for a research council to invest in anything besides project-oriented grants. There is of course always the possibility that the MRC also made its decline a way of commenting on the Cancer Society's demands during the Rockefeller negotiations. However, rent was not an issue with the other parties, at least not according to Ole Bang:

The University expressed an interest in having 1000 m² - but hardly over 3000 m² - of laboratory space at their disposal for University research groups, while Rigshospitalet stated that in all probability it wished to place the Fibiger Laboratory and a few other activities in connection with the research centre. Most recently, the Minister of Health has stated an interest in placing in the centre an Institute for Health Analysis, which is to be created by merging the National Board of Health's department for medical statistics with the Danish Institute of Clinical Epidemiology.⁵⁵¹

Again, the MRC minutes reflect that more or less all the representatives from the MRC, Copenhagen University, and Rigshospitalet were opposed to the idea of a cancer research centre within the context of the Danish Cancer Society. They would rather have a jointly operated and co-financed centre managed by all involved parties. Still, Bang gave the Society's Scientific Council the impression that the public researchers widely supported the centre. But if he did exaggerate the interest of the public parties in his presentation to the Council, or at least take it for granted a bit prematurely, there was good reason to do so. The Society was about to spend a considerable amount of money on the Finsen building stock, if the Scientific Council gave the plans thumbs up from a scientific point of view. The Scientific Council consisted of intramural *and* extramural cancer researchers who were all strongly rooted in the research community as either basic or clinical researchers, and a common trait for them was that they did not necessarily appreciate a financial strategy to invest in real estate, if the money could have otherwise been spent directly on cancer research. The management's business strategy was therefore incompatible with the Scientific Council on this point, but the establishment of a *cancer research centre* on the premises, on the other hand, would legitimate the purchase of the Finsen area. But if the extramural research groups did not have an interest in moving into the new centre, the Scientific Council would probably be wary about purchasing the Finsen grounds which were far too large for the Society's own research units alone.

The meeting illustrated the gap between the logic of the Society's management and those of the rest of the cancer community, who slowly began to question whether it was appropriate for a private cancer charity to have so much power in the cancer community in a way that left no

⁵⁵¹ Ibid.

The Cancer Centre That Never Was

room for objections. The Society followed its fruitful strategy of employing business inspired investment models and choices and utilised the institutional matrix to improve its standing and symbolic capital (making its economic capital predominant) in the cancer field. The organisation clearly stated the importance of a Society-dominated centre in order to serve its own cause and goals, and this must have worried some of the involved public planning parties. They would be left out of the loop in a centre dominated by a private cancer organisation that now embodied the bureaucratic privatisation tendencies seen at the hospitals (albeit at a minor scale) through the introduction of New Public Management, and the fear of centralised direction and potential non-medical/non-scientist influence over scientific planning may have contributed to the edginess of the negotiation parties at the meeting.

The meeting thus marked a breakdown of negotiations between the collaboration partners, and the differences of opinion in the cancer community grew stronger during that year⁵⁵². Professor Heine Høi Hansen from the Society's Scientific Council and Rigshospitalet's Radium Station informed the press that he was worried that the Society had grown too powerful for the good of Danish cancer research, and in a newspaper article this anxiety was expressed in the following way:

A cemented monopoly in Danish research. A private organisation with so much capital that it enjoys more influence on cancer research than the State. "I do not dare to think what would become of Danish cancer research *without* money from the Danish Cancer Society. In many places, the research would come to an abrupt halt", says physician Heine Høi Hansen of Rigshospitalet's Radium Station. "But it is worrying that one single organisation possesses so much power that the research is dependent on a single line of research. What if it turns out to be wrong?". Heine Høi Hansen is also a member of the Society's Scientific Council which is composed by of 12 independent experts.⁵⁵³

A group of physicians and clinicians were distressed that the Society tended to neglect to award grants to clinical research projects and that the organisation seemed to prefer molecular oncology. Oncologist Mikael Rørth from Rigshospitalet who had just attended the January meeting, criticised the Society for letting marketing strategies and commercial interests dictate the Society's research policy: e.g. launching the large-scale project "Diet and Cancer" that entirely bypassed the Scientific Council⁵⁵⁴. Other critics, who remained anonymous in

⁵⁵² Haagerup, U., T. Larsen, et al. (1990b) "Kræft-mastodonten" Jyllands-Posten 21-01-1990

⁵⁵³ Kristiansen, M. (1989) "Læger føler sig til grin" Weekendavisen 08-12-1989.

The Society naturally supported more than one line of research. With his statement, Høi Hansen is merely taking the issue to a logical extreme.

⁵⁵⁴ Andersen, C. (1989) "Millioner ruller til kræftforskningen" Politiken København 19.03.1989.

Hilton, G. (1990) "Kræft-direktør i modvind" Berlingske Tidende København 31.01.1990, p. 5.

The Cancer Centre That Never Was

newspaper articles, accused the Society of initiating scientific projects on the basis of their popularity amongst their members and donors rather than on their scientific quality⁵⁵⁵.

All in all, it appeared to the readers of the articles as if the Society did not receive the wide support from either intramural or extramural researchers it had hoped for. At this point, the powerful organisation did not retaliate or try to defend itself in the press even though the public opinion (informal institutions in the form of taste and preferences) was of pivotal importance to the Society and the success of its new strategy of serving the anti-cancer cause through real estate investments and strategic popular research programs rather than the traditional peer reviewed grant allocation activities it had used to perform as a modest cancer charity. In spite of the failed negotiations at the January meeting, the Society pushed for further negotiations about a sale of the Finsen grounds. This time, the organisation took another approach, as it embarked on direct negotiations with the Ministry of Health who had turned out to be the rightful owner of the Finsen hospital. However, the Society's dealings with government officials were kept in strict confidence, and it has not been possible to find many official records of the proceedings.

5.3 Using the press as a battleground

The Minister of Health, Elsebeth Kock-Petersen, wanted to put the Finsen complex on sale in open tendering (outsourcing), as was standard practice in the process of privatisation⁵⁵⁶: the transfer of ownership from the public sector (government) to the private sector (business). In this way, the Ministry was guaranteed the highest bid from interested buyers. However, a special exemptions clause allowed for a direct sale to an interested buyer, if a special, weighty cause so indicated⁵⁵⁷. The Society argued that there was hardly a worthier cause than the establishment of

In the late 1970's, the American anti-cancer establishment assigned increasing priority to the study of the role of diet and nutrition in controlling cancer. Laboratory studies had identified several natural and manmade carcinogenic agents in food additives, and epidemiological studies showed that migrants moving from other countries to the US and adopting the native dietary habits eventually showed patterns of cancer incidences similar to those of the natives. However, the evidence was far from conclusive, and critics pointed to the fact that it was far too difficult to pinpoint the role of specific foods among the many environmental and genetic factors that could also cause cancer. Also, foods that statistically had been linked with cancers in certain nationalities were not linked similarly in other nationalities. In addition to this, critics noted that there were no thoroughly controlled studies of the effects of diet over entire life spans of the study's subjects. However, the epidemiological studies on nutrition and cancer offered an attractive hypothesis: that cancer could be controlled through the diet, and leaders of the NCI and the ACS began stressing the importance of this in spite of the inconclusive evidence, see: Patterson, J. T. (1987). The Dread Disease: Cancer and Modern American Culture. Cambridge, Harvard University Press p. 260-262. This lack of unequivocal proof vs. the attractiveness of the hypothesis may have been the reason why the Danish Cancer Society was criticised for bypassing its scientific council and launching the "Diet and Cancer" program which was financed with collected funds earmarked specifically for this purpose.

⁵⁵⁵ Kiberg, C. (1989) "De gode kræfters spil" Berlingske Tidende 02-10-1982.

⁵⁵⁶ Haagerup, U., T. Larsen, et al. (1990b) "Kræft-mastodonten" Jyllands-Posten 21-01-1990

⁵⁵⁷ Biannual Report of the Chairman, December 1989. *Personal papers of Ole Bang, (Copenhagen)*. p. 27.

The Cancer Centre That Never Was

a national cancer research centre, and that it was only appropriate for the Minister of Health to use the special clause, so that the Society would not have to pay more than necessary for a cancer research centre that ideally ought to have been financed by the State in the first place. According to the press coverage, Elsebeth Kock-Petersen insisted on calling for tenders, as she had pledged to the government and several other political parties represented in the State's Privatisation Council⁵⁵⁸. This was in direct accord with the Government's general policy of rationalisation and making public organs act in synch with market conditions. Ole Bang and the Society thus had to make a high bid on the grounds (DKK 140 million) – a price estimated by the Ministry of Tax – in order to avoid aggressive competitive bidding from other interested parties⁵⁵⁹. However, the bid turned out to be too low. In the words of chairman Bent Harvald:

Even so, the Minister of Health decided to put the Finsen grounds for sale in open tendering, and after failed negotiations with the Minister and due to the importance of the matter, we were compelled to enter a public confrontation with the Minister.⁵⁶⁰

The arena of this confrontation was the media. In September 1989, the Danish Cancer Society went to the press. It accused the Minister of Health of refusing to sell the Finsen campus at a reasonable price and thereby of thwarting the efforts to establish a cancer research centre⁵⁶¹. According to one newspaper article, the result was a minor media debate⁵⁶² involving several

⁵⁵⁸ Haagerup, U., T. Larsen, et al. (1990b) "Kræft-mastodonten" Jyllands-Posten 21-01-1990

⁵⁵⁹ Biannual Report of the Chairman, December 1989. *Personal papers of Ole Bang*, (Copenhagen). p. 27.

⁵⁶⁰ Ibid.

⁵⁶¹ Haagerup, U., T. Larsen, et al. (1990b) "Kræft-mastodonten" Jyllands-Posten 21-01-1990

⁵⁶² See, Kiberg, C. (1989) "De gode kræfters spil" Berlingske Tidende 02-10-1982, Kristiansen, M. (1989) "Læger føler sig til grin" Weekendavisen 08-12-1989, NN. (1989) "Kræftens Bekæmpelse fik lov at købe Finsen" Politiken 19.12.1989; Skovmand, K. (1989) "Frontberetning fra krigen mod kræften" Politiken 26-11-1989. The event became the starting point for a public debate between the Society, politicians, and a group of researchers opposed to the Society, dealing with issues ranging from the sale of the Finsen grounds and the negotiations for a cancer research centre on Finsen to criticism of the way the Society was operated. An indicator of the extent of the media debate is the number of articles, the author of this thesis has been able to find via media databases by entering words such as "Cancer Society" and "centre". From December 1989-december 1990, I found 30 articles on the sale of the Finsen grounds and the plans to establish a centre. The result indicates that there must have been written even more articles on the topic, as not all articles are registered in the media databases. The articles I have found are written by journalists, politicians such as Arne Melchior, members of the Society's management, and cancer researchers: NN. (1989) "Kræftens Bekæmpelse fik lov at købe Finsen" Politiken 19.12.1989, Skovmand, K. (1989) "Frontberetning fra krigen mod kræften" Politiken 26-11-1989, Blasi, F., E. Bock, et al. (1990) "Kræftforskere kan samarbejde" Politiken 01.02.1990, Hilton, G. (1990) "Kræft-direktør i modvind" Berlingske Tidende København 31.01.1990, Hilton, G. (1990) "Ministre vil mægle om Finsen" Berlingske Tidende København 01.02.1990, Hilton, G. (1990) "Finsen-uro pludselig slut" Berlingske Tidende København 02.02.1990, Hilton, G. (1990) "Bofællesskab for kræftforskere" Berlingske Tidende København 02.02.1990; Hilton, G. (1990) "Finsen-salg på ny udskudt" Berlingske Tidende København 03.02.1990; Haagerup, U., T. Larsen, et al. (1990b) "Kræft-mastodonten" Jyllands-Posten 21-01-1990; Larsen, T., H. Thomsen, et al. (1990) "Det store kræftshow" Jyllands Posten 11.03.1990 Kjørgaard, J. J. (1990) "Internationalt kræft-center" Berlingske Tidende København 24.02.1990, Larsen, T. (1990) "Bred tilslutning til plan for nyt kræftforskningscenter" Jyllands Posten 10.02.1990, Larsen, T. and H. Thomsen (1990) "Fejden om Finsen" Jyllands Posten 09.02.1990, Larsen, T. and H. Thomsen (1990) "Finsen brogede historie" Jyllands Posten 09.02.1990, Larsen, T., H. Thomsen, et al. (1990) "Det store kræftshow" Jyllands Posten

The Cancer Centre That Never Was

political parties; the Society received political backing and sympathy, and the socialist political opposition to the Government mustered a majority in the Folketing that demanded a direct sale of Finsen to the Society⁵⁶³. The matter was scheduled to be debated on October 31st 1989, but the government gave in to the massive pressure one day before the hearing. In a press release, the Minister of Finance announced that the Government would let the Society buy the Finsen complex⁵⁶⁴. The opposition did not rest, however, and two parties even wanted to *reduce* the price of the Finsen grounds.

According to Bent Harvald, the parties argued that it was hardly fair to make the Society pay the full price for the complex, given that some of the buildings were originally built for the Radium Station by the Society itself, before the Station and the buildings were handed over free of charge to the State in the early 1960s⁵⁶⁵. The situation was such that the Society already owned one of the buildings at campus and rented certain other buildings – i.e. the buildings which the Society had handed over to the State – for the rest of its activities, see figure 5-1⁵⁶⁶. A sale of the Finsen campus to any other candidate than the Society would have put the cancer charity in a tight spot, as it would risk being evicted from its rented buildings and having its sole laboratory building situated on a stranger's lot. But with the political backing for the sale the press-mediated war was over, and the Minister of Health admitted that the management of the Society had played their cards well:

They controlled the press; and there was no room for professional debate. It is hard to disagree with the Cancer Society. Their message is simple and powerful in the media: Are

11.03.1990, NN. (1990) "Der forhandles igen om Finsen-området" Berlingske Tidende 15.02.1990, NN. (1990) "Kræftens Bekæmpelse afviser pris på Finsen" Berlingske Tidende 18.03.1990, NN. (1990) "Ballade om kræft-center" Midtjyllands Avis 23.01.1990, NN. (1990) "Forsker: Kræftens Bekæmpelse er ved at miste troværdigheden" Jyllands Posten 26.01.1990, POL (1990) "Kræftens Bekæmpelse" Politiken København 15.12.1990, Thomsen, H., T. Larsen, et al. (1990) "Diskret storvask, haltende demokrati" Jyllands-Posten 13-05-1990, Tolderlund, S. (1990) "Finsen-området næsten rømmet" Berlingske Tidende København 21.07.1990, Ulveman, M. (1990) "Politikere føler sig ført bag lyset i sag om Finsen" Berlingske Tidende København 27.01.1990, Westphal, A. (1990) "Samarbejde om kræftforskning" Politiken København 24.01.1990, Westphal, A. (1990) "Politikere skal mægle mellem kræftforskere" Politiken København 27.01.1990, Westphal, A. (1990) "Ministeren støtter kræftorganisation" Politiken København 04.02.1990, Hilton, G. (1990) "Forslag om to direktører" Berlingske Tidende København 02.02.1990, Hilton, G. (1990) "Ole Bang: Dreven og dygtig" Berlingske Tidende København 04.02.1990, Hagerup, A. (1990) "Spillfugle bruges i kræftbekæmpelse" Berlingske Tidende København 11.03.1990, NN. (1990) "Uenighed om overtagelse af Finsen" Berlingske Tidende 18.03.1990, NN. (1990) "Uenighed om prisen på Finsen" Politiken 02.05.1990.

⁵⁶³ Haagerup, U., T. Larsen, et al. (1990b) "Kræft-mastodonten" Jyllands-Posten 21-01-1990

⁵⁶⁴ Ibid.

Biannual Report of the Chairman, December 1989. *Personal papers of Ole Bang*, (Copenhagen). p. 27.

⁵⁶⁵ Ibid. p. 27-28. To make matters even more complicated, the Finsen Laboratory was renting laboratory space in a research building owned by the Society at the Finsen campus.

⁵⁶⁶ Larsen, T. and H. Thomsen (1990) "Finsen brogede historie" Jyllands Posten 09.02.1990

The Cancer Centre That Never Was

you for or against cancer? They made it seem as though I was fighting against a people's cause.⁵⁶⁷

The strategy of Bang and his colleagues had been effective. They had to protect the financial interests of their business, the Cancer Society; by buying the Finsen grounds at the lowest possible price with the purpose of 1) making sound investments in real estate, 2) establishing a cancer centre to strengthen Danish cancer research, 3) getting the publicity benefits of the centre (continuing to utilise the informal institutions in the form of increasing societal returns/charitable donations and support). As of now, the strategy of defecting the Rockefeller plans and the transition from modest charity to modern cancer corporation had been relatively frictionless in the public eye, and the pursuit of other “self-serving” plans had paid off without consequences for the Society such as e.g. attacks on its Achilles heel: Its public image and its dependence on the continued contributions from private donators.

In a sociological perspective, the wealthy and research supporting Society had managed to do this by defining its economic capital as symbolic capital (power) in the cancer field. The Society had succeeded in coaxing the Minister of Health into selling the grounds directly to the Society, and the organisation considered it a victory. But there was no time to rest on the laurels. In a dynamic social field battling on different types of capital, there is a thin line between being powerful and a tyrant.

On January 21st 1990, one of the country's leading newspapers ran an article about the dominance of the Society in the cancer community⁵⁶⁸. The article was very critical of the Society's aggressive marketing strategies in general and of Ole Bang in particular, as the strategies were his professional specialty, so to speak, and not that of his executive committee. The authors had interviewed several intramural and extramural researchers, who expressed their concern about the structural organisation of the Society and the absolute power which its management exerted on the cancer community. Not surprisingly, long-time critic Jørgen Kieler was among the cited researchers. However, the head of the Society's “Diet and Cancer” project, Dr Ejvind Thorling, also lent voice to the growing criticism against the Society. He was concerned about the fact that director Ole Bang was cast in the role as secretary at the meetings

⁵⁶⁷ Haagerup, U., T. Larsen, et al. (1990b) "Kræft-mastodonten" *Jyllands-Posten* 21-01-1990

⁵⁶⁸ Ibid.

The Cancer Centre That Never Was

for the Society's Scientific Council. He did not find it appropriate for the director to be involved in these purely scientific meetings⁵⁶⁹.

In addition to this, the article criticised the fact that the Scientific Council did not have a fixed order of priority regarding which cancer-related projects to support, as it claimed that the (undisclosed) list of interviewed researchers were not satisfied with the Council's statement that it only allocated funds according to the criteria of "quality", and as the undisclosed researchers argued that clinical cancer research was not prioritised enough compared to experimental cancer research⁵⁷⁰. But apart from shedding light on the brewing troubles between the scientific culture and the political administration of the Society, the newspaper article stirred up troubled waters by bringing details from an at-the-time unpublished letter from Ole Bang to the Minister of Health. According to the reporters, who did not mention how they had got hold of the letter, Bang wrote to the minister 13 days before the Folketing had planned to discuss the matter of the sale of the Finsen grounds to the Society in October 1989. In his letter, Bang supposedly gave a thorough description of "The Danish Cancer Society's Research Centre", and he argued that he had presented the plans to representatives from the MRC, Rigshospitalet, and the University at the MRC-initiated meeting on January 11th 1989⁵⁷¹. According to Bang, these representatives had expressed their interest in and support for the proposed centre plans, much as he had told his Head Board on the same occasion⁵⁷².

As mentioned above, the minutes of the MRC-led meeting did not reflect such support. On the contrary, the representatives were wary of a centre dominated completely by the Society. Nevertheless, the uncorresponding accounts of the January meeting did not surface until the following October. According to the newspaper article, the Minister of Health forwarded Bang's letter to the MRC on October 19th 1989, and the members of the Council subsequently dismissed Bang's version of the events as a "misinterpretation"⁵⁷³. The representatives had never been interested in a cancer research centre owned by the Society, and in which the public research groups would not be allowed much influence. On the contrary, the MRC wanted a type of

⁵⁶⁹ Ibid.

⁵⁷⁰ See also, Kristiansen, M. (1989) "Læger føler sig til grin" *Weekendavisen* 08-12-1989, where the same is claimed.

⁵⁷¹ Note on the Danish Cancer Society's Research Centre, October 18th 1989. *Archive of the Danish Cancer Society, (Copenhagen)*.

⁵⁷² Ibid. p. 2.

⁵⁷³ Haagerup, U., T. Larsen, et al. (1990a) "Kræft-mastodonten" *Jyllands Posten* 21.01.1990

Report of the Chairman to the Head Board of the Cancer Society, February 14th 1990. *Personal papers of Ole Bang, (Copenhagen)*. p. 4.

The Cancer Centre That Never Was

management through which the involved institutes were given equal status and rights, and it recommended that the Ministries of Education, the Interior, and Health should contribute with their share of buildings and half of the expenditures of the centre⁵⁷⁴. This would help balance the unequal power distribution between the Cancer Society and the other publicly owned and financed institutes involved in planning for the centre. The current situation, in which the Cancer Society was the major powerbroker in the cancer community, was reflected in the proposed and entirely privately owned cancer centre, and this was not a favourable situation for the other negotiation parties who sought influence and were thus forced to do whatever they could to change the situation and to even out the playing field.

The Society's cancer research centre did not have the wide scientific support that Bang claimed. But although the MRC and the Minister of Health were aware of this inconsistency, the government gave in to the massive and combined pressure of the political opposition and the press to sell the Finsen campus to the Society only three days after. So why did the MRC and the Minister not come forward with their findings at that point? The Minister was caught in a political power play where any attack on the Cancer Society would be interpreted by the press as an attack on the anti-cancer cause, so it is understandable that she forfeited. Especially seen in the light that the government was already unpopular in the press and the public for introducing rationalisations and prioritising in the hospital sector instead of supporting expansion of the area. As mentioned before, the Ministry of Health was established partly as a response to the public criticism in order to signal the government's acknowledgement of the health care sector's importance. The Finsen matter was therefore a sordid business for the Minister of Health, as forcing a cancer charity to pay full or even over-price for the Finsen grounds as part of the government's privatisation strategy would surely be perceived by the public as cynical.

As for the members of the MRC, many of which were cancer researchers themselves, their silence is more curious as they were not vulnerable to accusations of being "for" cancer or vulnerable to falling out of grace with electorates. They may simply have wanted to steer clear of the "mess" for as long as possible. Whatever their reasons for silence, the matter was only brought to light with the newspaper story in January 1990, as the reporters presented their findings to the members of the Danish parliament (Folketing) who after hearing about the matter for the first time felt misled by the Director of the Cancer Society, and were no longer animated

⁵⁷⁴ Ibid.

The Cancer Centre That Never Was

to sell the Finsen complex to the cancer charity⁵⁷⁵. When the reporters confronted Bang with their findings, he admitted to having over-interpreted the interest of the other institutes in the potential cancer research centre, but he did not think it made that much of a difference:

But I will not apologise for it. They do, in principle, support the plans for a research centre. And we have never stated that the public laboratories should be run in the context of the Society. And I cannot believe that the State will not collaborate just because the centre will bear our name. For that it will. I guarantee it.⁵⁷⁶

The Society's management had not been presented with the MRC's response to Bang's letter to the Minister of Health⁵⁷⁷. The allegations in the newspaper article thus came as a surprise. On January 23rd 1990, Ole Bang and Bent Harvald wrote a letter to the newly instated Minister of Health, Ester Larsen, in order to straighten out the matter. In the letter, they explained the discrepancies between the Society's and the MRC's accounts of events as a misunderstanding:

The Danish Cancer Society wishes to announce that it has, of course, *never* stated or imagined that public or other extramural cancer research laboratories, which under the terms of agreement may be placed within the physical frames of the centre, should be run in the context of the Danish Cancer Society.⁵⁷⁸

Apparently, there had been a breakdown of communication at the January meeting 1989, for Bang and Harvald now claimed that they had always wanted the centre to be governed in the manner in which the majority of the MRC-working group had suggested in their report on the Rockefeller Centre in 1984, see chapter 4. This mode of management entailed a "Supervisory Board" and a "Coordination Council", and these bodies represented the funding bodies and researchers involved in equal measure. Bang and Harvald insisted that the Society had been acting in good faith, and that the centre would naturally be governed in a democratic manner. Still, the name of the centre had to be "The Danish Cancer Society's Research Centre" for marketing purposes.

On the very same day that Bang and Harvald wrote the said letter, politicians such as the now former Minister of Health Elsebeth Kock-Petersen and Arne Melchior used the press to air their moral condemnation of the Society's alleged manipulation of the Folketing's Privatisation

⁵⁷⁵ Haagerup, U., T. Larsen, et al. (1990a) "Kræft-mastodonten" *Jyllands Posten* 21.01.1990

⁵⁷⁶ Ibid.

⁵⁷⁷ Report of the Chairman to the Head Board of the Cancer Society, February 14th 1990. *Personal papers of Ole Bang, (Copenhagen)*. p. 5.

⁵⁷⁸ Letter from Ole Bang and Bent Harvald to the Ministry of Health, January 22nd 1990. *Archives of the Danish Cancer Society, (Copenhagen)*. p. 2.

The Cancer Centre That Never Was

Council⁵⁷⁹. Arne Melchior stated that he had been misled by the Society and demanded that the sale of the Finsen campus be postponed until the researchers and the cancer charity came to an agreement on the terms of the centre⁵⁸⁰. Just as the Society had used the press to make the politicians give them a choice to buy the Finsen ground, others were now using the press against the Society⁵⁸¹. On January 24th 1990, the MRC dismissed the Society's explanation that it was all just a misunderstanding, and the Privatisation Council threatened to sell the Finsen campus to someone else than the Society⁵⁸². The Society tried to make it clear to all that it had never been its intention to control or interfere with the research of the public research groups in the new centre, but it was to no avail⁵⁸³. And the organisation was attacked from other sides as well. Heine Høi Hansen was chairman of the professional society *the Danish Cancer Research Association*, cancer researcher at the Copenhagen Municipal Hospital, and a member of the Society's Scientific Council. On January 26th, he accused the Society of monopolising Danish cancer research and advised the Folketing's Privatisation Council not to sell the Finsen ground⁵⁸⁴. According to Høi Hansen, the members of his professional association of cancer researchers wrote a letter to the Folketing's health policy group and announced their full support to the MRC and its accusations against the Society⁵⁸⁵. According to Høi Hansen, the members of the association wanted the politicians to make sure that the centre would have an independent, professional and scientific management, and this was taken to heart, as the Folketing's Privatisation Council decided to postpone the sale until the Society reached an agreement with the State-owned research groups⁵⁸⁶. The council wanted the Minister of Education and Research and the Minister of Health to take their stand on the issue⁵⁸⁷.

⁵⁷⁹ A council consisting of representatives from the political parties of parliament/the Folketing, who discussed the conditions of transfers of ownership from the public sector to the private sector e.g. the sale of the Finsen buildings.

⁵⁸⁰ Larsen, T. and H. Thomsen (1990) "Fejden om Finsen" *Jyllands Posten* 09.02.1990.

NN. (1990) "Ballade om kræft-center" *Midtjyllands Avis* 23.01.1990

⁵⁸¹ This is seen in a series of articles: NN. (1990) "Ballade om kræft-center" *Midtjyllands Avis* 23.01.1990, NN. (1990) "Forsker: Kræftens Bekæmpelse er ved at miste troværdigheden" *Jyllands Posten* 26.01.1990, Hilton, G. (1990) "Kræft-direktør i modvind" *Berlingske Tidende* København 31.01.1990, Ulveman, M. (1990) "Politikere føler sig ført bag lyset i sag om Finsen" *Berlingske Tidende* København 27.01.1990, Larsen, T. and H. Thomsen (1990) "Fejden om Finsen" *Jyllands Posten* 09.02.1990, Larsen, T. and H. Thomsen (1990) "Finsen brogede historie" *Jyllands Posten* 09.02.1990; Larsen, T., H. Thomsen, et al. (1990) "Det store kræftshow" *Jyllands Posten* 11.03.1990, Thomsen, H., T. Larsen, et al. (1990) "Diskret storvask, haltende demokrati" *Jyllands-Posten* 13-05-1990,

⁵⁸² Larsen, T. and H. Thomsen (1990) "Fejden om Finsen" *Jyllands Posten* 09.02.1990

⁵⁸³ Westphal, A. (1990) "Samarbejde om kræftforskning" *Politiken* København 24.01.1990.

⁵⁸⁴ Larsen, T. and H. Thomsen (1990) "Fejden om Finsen" *Jyllands Posten* 09.02.1990

⁵⁸⁵ NN. Ibid.: "Forsker: Kræftens Bekæmpelse er ved at miste troværdigheden" 26.01.1990

⁵⁸⁶ Ulveman, M. (1990) "Politikere føler sig ført bag lyset i sag om Finsen" *Berlingske Tidende* København 27.01.1990, p. 3.

⁵⁸⁷ Ibid.

The Cancer Centre That Never Was

In the Northian and Bourdieuan terminology, the Society was losing bargaining strength, as a change in informal institutions (the taste and preferences of the public) seemed to be influenced by the media campaign that discredited the Cancer Society and its actions. Whereas the Society's image as the proponent of the noble anti-cancer cause had previously been working for the Society in the form of positive public feedback and contributions (exchanged to social and economic capital) – bargaining power – that could morally force the government to make a transaction to sell the Finsen grounds, this leverage was now gone. The politicians now set the terms of transaction as they responded to a change in the public opinion (their electorate) and the loaded media campaign. The Society no longer dictated the terms of the sale and was struggling to make the best bargain possible under the new unfavourable power-balance. Purchasing Finsen was pivotal to the Society and its new business inspired investment strategy. By undermining the image of the Society and by portraying its attempts to mislead the politicians as somewhat shady and cynical, and by questioning its motives to create a centre, the critical researchers undermined the economic capital of the Society as an amoral currency and positioned themselves as the morally superior contenders of the anti-cancer cause. They had hit the Society in the one place where it hurts, and the public therefore reacted accordingly. It was the kind of third part enforcement in the form of broader societal returns (or lack thereof) that had not punished the Society's defection from the Rockefeller plans, but which was now taking its toll on the Society, its centre plans, its investment strategy and continued existence. Those who were formerly the weaker in the social field were now growing stronger and stronger through strategic alliances with politicians from the government's Privatisation Council. In summation, a change in informal constraints affected politicians to act against the Society's interests. Had the Society's management flown too close to the sun?

The Cancer Society hastily extended invitations to the MRC, Rigshospitalet, and the University in order to unravel the difficult situation at a meeting on January 31st 1990. The MRC declined as they wanted to wait for the two ministers to call for a negotiation meeting, and because the MRC members needed more time to discuss the financial and political aspects of the proposed centre. Nevertheless, a meeting between representatives of the Society, Rigshospitalet, and the University was held. It has not been possible to find any minutes of this meeting, but it is described in chairman Bent Harvald's report to the Society's Head Board, February 14th 1990.

Westphal, A. (1990) "Politikere skal mægle mellem kræftforskere" Politiken København 27.01.1990, p. 8.

The Cancer Centre That Never Was

In this report, Harvald claims that the parties agreed to pursue the plans for the research centre, and he quotes a press release that was allegedly written by all the meeting participants⁵⁸⁸.

Given that it has not been possible to find the original paper, or a version signed by all participants, it is uncertain whether or not all of the participants actually contributed to writing the statement and/or agreed to its content. With this reservation in mind, the chairman's report gives the impression that the meeting participants agreed on a centre governed according to the guidelines of the Rockefeller centre-proposal, and that the Society had waived its demand for the name of the centre which was now called "the Finsen Park"⁵⁸⁹. The press release was forwarded to the Minister of Health and the Minister of Education⁵⁹⁰.

Meanwhile, both extramural and intramural researchers used what seemed like a momentary weakness on the part of the Society to attack through the press. Some of them argued that Ole Bang meddled too much with the allocation of grants for cancer research projects⁵⁹¹. Dr Heine Høi Hansen, who was a member of the Scientific Council, criticised the fact that the Council was only allowed to share out 37% of the amount of money set aside by the Society for research activities⁵⁹². The Society stated in its annual reports to its members that it allocated 60% of its income to cancer research. The remaining 23% that was not spent by the Scientific Council was allegedly distributed by the Society's Executive Committee which, in contrast to the Council, did not consist entirely of members with scientific expertise. The money was thus spent on general grants and basic budgets for the Society's own research units⁵⁹³. This was, however, not entirely clear from the Society's non-transparent budgets.

It is noteworthy that these accusations went beyond the then current question of whether or not Ole Bang and Bent Harvald had deliberately manipulated the Privatisation Council into selling the Finsen grounds. They constituted a much broader attack on the Society as a whole, and the focus of the media debate began to blur. The average reader must also have been confused by the many participants in the debate. On February 1st, a group of researchers from both the publicly held institutes and the Society co-wrote a newspaper article in which they stressed that

⁵⁸⁸ Report of the Chairman to the Society's Head Board, February 14th 1990. *Personal papers of Ole Bang, (Copenhagen)*. p. 7.

⁵⁸⁹ Ibid.

⁵⁹⁰ The private business tended to send out press releases every time their politics and plans were of interest to the public. This was not tradition at the University and Rigshospitalet.

⁵⁹¹ Hilton, G. (1990) "Kræft-direktør i modvind" *Berlingske Tidende* København 31.01.1990, p. 5.

⁵⁹² Larsen, T. and H. Thomsen (1990) "Fejden om Finsen" *Jyllands Posten* 09.02.1990

⁵⁹³ Meeting minutes of the Scientific Council, October 23rd-25th 1989. *Personal papers of Jes Forchhammer, (Bagsværd)*. p. 2.

The Cancer Centre That Never Was

they – the researchers – had no problems collaborating and that they were all for a research centre and coordinating Danish cancer research⁵⁹⁴. They argued that the same was true for the institutes which they represented⁵⁹⁵.

So who *were* in fact fighting and why? According to the author of another newspaper article published on the very same day, the conflict was between a group of publicly-employed researchers and the political administration of the Society, but the reporter also mentioned a disagreement between the Society on the one hand and the respective administrative levels of MRC, Rigshospitalet, and the University on the other. When looking at the material in question, it seems that there was more than one conflict going on at the same time, and that at least some reporters were mistaking them for being about the same thing, although they were not. The attack on the research policy and administrative structure of the Society did not have anything to do with the ongoing negotiations about the Finsen Park.⁵⁹⁶ However, the Society and its impending purchase of the Finsen Campus were vulnerable to any discrediting PR at this stage, and the press/the public opinion was in the position to be both judge, jury and executioner.

Seen from a Northian and Bourdieuan perspective, this again indicates that the critical voices had positioned the Danish public as a third party enforcer in the transaction of establishing a cancer centre in order to influence the initiative as much as possible. The enforcement was not traditional in the sense known from economic transactions bound by legal contracts such as the State's sale of the Finsen grounds to the Society. Such a transaction would be surrounded by rules and regulations and legal ramifications, if any transacting party should choose to defect a signed deal. But as mentioned above, the sale of the Finsen campus was State leverage to make the private Cancer Society construct a privately financed cancer centre in which the public negotiation parties (and their research groups) would be given the same influence and terms as in the now collapsed co-financed Rockefeller plans. Nevertheless, a sale could still be completed at market price without the use of the exemption clause and would in such a case be morally and legally independent of the establishment of a cancer centre. And this would make the Society regain power to use the grounds at its own discretion. Leverage concerning the sale was thus directly linked to the exemption clause (and the subsequent reduction of the State's asking price) that allowed the State to sell to an interested party with a "worthy cause" and reason for

⁵⁹⁴ Blasi, F., E. Bock, et al. (1990) "Kræftforskerne kan samarbejde" Politiken 01.02.1990. The researchers were: Keld Danø and his collaboration partner Fransesco Blasi (Rigshospitalet), Elisabeth Bock (The Medical Faculty, Ole Møller Jensen (The Danish Cancer Registry) and Jesper Zeuthen (The Fibiger Institute).

⁵⁹⁵ Ibid., p. 7.

⁵⁹⁶ Hilton, G. (1990) "Ministre vil mægle om Finsen" Berlingske Tidende København 01.02.1990, p. 3.

The Cancer Centre That Never Was

purchasing the campus. Such a worthy cause could be a cancer centre – or the anti-cancer cause in general – but by using moral arguments to force the politicians to use this clause, a sale would make the Society morally (but not legally) obligated to establish a cancer centre.

When the press revealed somewhat shady negotiation tactics on the part of the Society, the intentions and moral of the cancer organisation was suddenly questioned and brought in play by critics, politicians and the press in the broader societal transaction known as the establishment of a cancer centre which all public and private planning parties could agree on. Because of the exemption clause, the Society opened a can of worms inasmuch as the organisation was suddenly vulnerable and subjected to all kinds of attacks on its moral conduct regarding:

- a) The Finsen sale.
- b) The establishment of a cancer centre.
- c) Its internal organisational dispositions regarding support for research.

In effect, the public opinion became the third party enforcement of the establishment of a cancer centre, and defection would potentially be very costly for the Society this time around. The broad media attacks ensured that the matter became a morally contingent transaction rather than just the plain sale of the Finsen campus. In this sense, the formal institutions (the exemption clause) and a change of informal institutions (taste and preferences of the public/press) were used to discredit the Society and to force it to yield influence on the centre AND the organisation's internal practices. A giant was forced to its knees.

In sociological terms, the critics saw the Society's strategy to use the exemption clause as an opportunity to undermine the cancer organisation's position in the cancer field by battling on one of the types of capital the Society had once had in abundance but which due to its new business inspired strategies and negotiation tactics could now be questioned: social capital. The Society's position as the main banner lead in the morally weighty war on cancer was undermined by cancer researchers and politicians doubting both the organisation's intentions in buying the Finsen (its investment strategy) and its use of money entrusted to it by the public. In other words, the Society's choice to go for economic capital was now questioned. The transition from modest charity (moral, social capital) to modern lobbying and investing business was now beginning to suffer a lack of positive feedback and broader societal returns.

At the time it would be difficult to predict or measure the effects of this change on the level of voluntary contributions to the Society if it did not immediately ride off the storm. In a short

The Cancer Centre That Never Was

period of time, the Society had gone from a non-apologetic response to the media campaigns to now bowing to many of the demands from the (public) critical researchers, which it had otherwise stood firm on (such as the centre's name and management model). Demands which were otherwise in conflict with the Society's strategy to capitalise on publicity value of the centre's name and to hold the most influence over the privately financed centre. In a Northian perspective, the strategy was suffering a lack of positive feedback due to a change of informal institutions, and the Society would therefore have to change tactics accordingly. Its reaction to extend influence to the critics indicates that:

- a) The purchase of the Finsen grounds was very important to the Society. So much that it was willing to give in on principle points regarding a potential cancer centre.
- b) The Society acknowledged the power of the press and public opinion as third party enforcement.
- c) The Society's strategy to buy the Finsen by appealing morally for the use of the exemption clause backfired, and the subsequent admissions were an attempt to ride off the storm whilst still acquiring the Finsen campus that was pivotal for the organisation's investment strategy.

5.4 Roles and morals

On the urging of the Privatisation Council, the Minister of Health and the Minister of Education and Research announced that they would now mediate in the conflict over the matter of management in the Finsen Park, and they considered inviting the negotiating parties to another meeting. But according to the vice-chairman of the MRC, oncologist Mikael Rørth of Rigshospitalet, the ministers had to consider their own role in the conflict as well⁵⁹⁷. As mentioned above, the State was a transaction party itself and therefore should and could not effectively mediate. According to Rørth, the ministers had to decide whether or not the Ministries of Education, the Interior, and Health should participate on a par with the Society in the financing of the centre. Rørth argued:

The State has a unique opportunity to be in on the research centre. We [the MRC] have suggested that the State contributes with either buildings or by reducing the price of the Finsen area. But we never received an answer.⁵⁹⁸

⁵⁹⁷ Ibid.

⁵⁹⁸ Ibid.

The Cancer Centre That Never Was

In practice, the lack of response from the ministers deprived the MRC of a mandate to negotiate any financial aspects of the Finsen Park proposal, which was why they had not participated in the previous meeting between the negotiating parties. The MRC was severely handicapped by this, and the conflict between the parties could hardly be resolved. And without this resolution, the Privatisation Council of the Folketing would not sell the Finsen campus. In theory, the negotiations remained deadlocked, but it was in the midst of all this that the Society sent out the aforementioned second press release stating that the cancer charity, Rigshospitalet and the University (allegedly) agreed on the name and the management of the "Finsen Park". The Folketing's Privatisation Council received this piece of paper at their meeting on February 2nd, and on the recommendation of the Minister of Health, the council members decided to sell the Finsen grounds to the Society at the price of DKK 140 million⁵⁹⁹. The news of the happy ending to a week's worth of drama was well received by the director of Rigshospitalet, Klaus Petersen:

We will create cohabitation for cancer researchers. We have shaken hands on sharing service facilities and on coordinating the research effort. But the different parties are still responsible for their own research.⁶⁰⁰

But just as the press had broadcasted the news of the sale, the Privatisation Council was presented with shocking news that blocked the sale of the Finsen area in the last minute. The University representatives had accused Ole Bang – and surprisingly not the other Society representatives – of misinterpreting their interest in the proposed Finsen Park once again⁶⁰¹. According to University representative and basic cancer researcher Elisabeth Bock, the negotiating parties did not agree unanimously:

We only agreed on the basis of the negotiations. Before a sale, it has to be resolved whether or not e.g. the State should be co-owner.⁶⁰²

In essence, the Society was accused of trying to coup their way to the sale of the Finsen area, and the story took headlines in the press⁶⁰³. The head of the Finsen Laboratory and basic cancer

⁵⁹⁹ Hilton, G. (1990) "Finsen-uro pludselig slut" *Berlingske Tidende* København 02.02.1990, p. 1.

⁶⁰⁰ Hilton, G. (1990) "Bofællesskab for kræftforskere" *Berlingske Tidende* København 02.02.1990, p. 2.

⁶⁰¹ Report of the Chairman to the Society's Head Board, February 14th 1990. *Personal papers of Ole Bang, (Copenhagen)*. p. 8.

Larsen, T. and H. Thomsen (1990) "Fejden om Finsen" *Jyllands Posten* 09.02.1990

Hilton, G. (1990) "Finsen-salg på ny udskudt" *Berlingske Tidende* København 03.02.1990, p. 2.

⁶⁰² Hilton, G. (1990) "Finsen-salg på ny udskudt" *Berlingske Tidende* København 03.02.1990, p. 2.

⁶⁰³ Ibid.

Report of the Chairman to the Society's Head Board, February 14th 1990. *Personal papers of Ole Bang, (Copenhagen)*. p. 8.

Larsen, T. and H. Thomsen (1990) "Fejden om Finsen" *Jyllands Posten* 09.02.1990

The Cancer Centre That Never Was

researcher, Keld Danø, went on national television and demanded that Ole Bang resigned from his post as the Society's director⁶⁰⁴. It has not been possible to document the motive behind Danø's attack besides his own account that he and the other critical researchers did what they could to bring attention to a cancer charity which did not play by the rules⁶⁰⁵. However, the Minister of Health insisted that she had never been misled by Ole Bang, and that the accusations made against him and the Society were wrong⁶⁰⁶. Instead, she told the press that she believed that a group of publicly employed cancer researchers were deliberately using the matter to gain influence on the private cancer charity⁶⁰⁷. But whatever the reason for the broadcasted attack was; the Society now reacted strongly to it.

As mentioned above, the Society had exposed itself to various types of attacks on its moral fibre going beyond the establishment of the proposed cancer centre. When it pleaded for the use of the exemption clause with moral arguments, it effectively made it fair game to discuss the Society's intentions and strategies publicly. The public opinion/press was third party enforcer and it affected both the government's Privatisation Council's will to sell the Finsen campus to the Society and it affected the Society's image in general. It is not possible to tell if the criticism had been kinder had the Society opted to buy the Finsen Campus on market conditions without the use of the exemption clause.

But the criticism of internal organisational dispositions in the private charity would not have been fair game in this case, as the Society would then just have made a traditional economical and contractually enforced transaction and would be free to do whatever it pleased with its acquisition. There would be no moral obligation to build a cancer centre or allow public parties from the cancer community to have any more influence than the charity saw fit. The Society's choice to opt for the exemption clause was therefore very costly. The organisation's next reaction to the latest attacks on its director – who embodied the economic capital and business logic that was subject to the moral attacks – was thus not surprising according to the theoretical framework of this thesis: the Society sought to right a wrong and costly decision that had deprived it of bargaining power.

⁶⁰⁴ Larsen, T. and H. Thomsen (1990) "Fejden om Finsen" *Jyllands Posten* 09.02.1990

⁶⁰⁵ Interview with Keld Danø, June 3rd 2005.

⁶⁰⁶ Westphal, A. (1990) "Ministeren støtter kræftorganisation" *Politiken* København 04.02.1990.

⁶⁰⁷ Ibid.

The Cancer Centre That Never Was

At an extraordinary meeting on February 3rd 1990, the Society's Executive Committee decided to withdraw its offer to buy the Finsen area. The decision was announced in a press release the very same day:

The offer was meant as a contribution to Danish cancer research, and we still feel that the idea is right. But we must, as a matter of fact, accept that there has not been sufficient support for the Cancer Society's initiative.

A decisive condition for the success of such a large project with so many participants has to be the establishment of a trusting collaboration. The debate of the last couple of weeks has convinced us that this is not possible right now. The anti-cancer cause is thus better served, if the Society's plan of buying the Finsen area is given up.⁶⁰⁸

In addition, the Society used the press release to state that it would instead spend more money directly on cancer research projects, and that Ole Bang still had the full support of the Society. For it was indeed Bang who was the target of the press-mediated accusations, not the Executive Committee he worked for. There were many reasons for specifically targeting Bang. He was more visible in the press than the Executive Committee. Also, he represented a private business logic and culture whose interests in asset management, marketing, rational target fulfilment, publicity, research administration, and investments simply clashed with those of the research community (who did not give high priority to business strategies and lay administration/interference of their research activities). And he was therefore an easier target than the scientists of the Executive Committee (such as Kjeldgaard and Harvald), who could not as easily be accused of not appreciating the values and needs of science.

As mentioned in chapter 4, the market conditions of the 1980s made the Cancer Society decide to make investments in buildings in order to protect its capital from the inflationary pressure, to get PR from its research activities, and to remain an autonomous agent in the cancer community. The Society's investment strategy was to protect its financial interests so that it would be able to serve the anti-cancer cause for years to come, even if the voluntary contributions should suddenly decrease. The way the anti-cancer organisation saw things was that it had a responsibility to spend the collected money in the best possible manner and had to act accordingly. But in doing so, its business logic and increasing wealth was somehow clashing with the modest ideology of a charity organisation, and Ole Bang who embodied this logic was criticised by the press for being greedy and acting indecently.

⁶⁰⁸ Report of the Chairman to the Society's Head Board, February 14th 1990. *Personal papers of Ole Bang, (Copenhagen)*. p. 8.

5.5 A second round of negotiations

As expected, the Society's decision to redraw its bid took leverage from the critics, and the public researchers tried to re-start negotiations with a more appeased approach to the matter as they were still interested in a centre for the reasons stated in the above and could not do without the Society's purchase of the Finsen campus either. It is interesting that the public researchers tried to perpetuate the path of the cancer centre, even when the Society had stated its intention of spending the money for the plan on grants-in-aid that could potentially benefit the researchers by financing their research. As the distribution of such grants was subjected to peer review through the Society's scientific council, this would have given the researchers some measure of influence. But they pushed for "a bigger fish" in the form of a centre. And why? Did they need it as leverage to pursue their attack on the Society's set-up? Did they see it as an ideal tool to coordinate Danish cancer research and/or to secure better lab facilities than in their current housing? No matter what, gridlock meant that no-one was likely to harvest the gains to be made from the transactions girding the matter. The Society was thus re-instated in its position of power in the cancer community. Its economic capital was once again symbolic capital and a powerful currency. The path of the cancer centre continued.

Ironically, the cultural differences that eventually led to the deadlocking of the talks were also the reason why the negotiation for a Danish cancer centre actually continued with different persons at the table. Shortly after the Executive Committee decided not to buy the Finsen area, a group of researchers from the Society, Rigshospitalet, the MRC and the University contacted Rigshospitalet's obstetrician Johannes Bock, who was chairman of the Society's Scientific Council. Because he was a clinician and not part of the Society's management, the researchers must have felt that it was easier and more effective to approach *him* instead of Ole Bang. They wanted to let Bock and the Society know that they were very positive towards the idea of establishing a cancer centre at the Finsen campus⁶⁰⁹.

One of the interested researchers, Keld Danø, proposed a new model for the research centre, in which the State did not sell *all* of the Finsen area in tender, but reserved a small area for a cancer research centre⁶¹⁰. Designing a "Danø-model" for the research centre – in which the state

⁶⁰⁹ Report of the Chairman to the Society's Head Board, February 14th 1990. *Personal papers of Ole Bang, (Copenhagen)*. p. 10.

Letter from Johannes Bock to the members of the Scientific Council, February 8th 1990. *Personal papers of Jes Forchhammer*, (Bagsværd). p. 1.

⁶¹⁰ Larsen, T. and H. Thomsen (1990) "Fejden om Finsen" *Jyllands Posten* 09.02.1990

Larsen, T. (1990) "Bred tilslutning til plan for nyt kræftforskningscenter" *Jyllands Posten* 10.02.1990

The Cancer Centre That Never Was

reserved a small part of the Finsen for a centre – would thus be a clever way of jumpstarting discussions. Danø's initiative was an attempt to level out the unequal power distribution in the field by trying to involve the State financially through the reservation of the building stock for the centre. This time, though, the initiative grew from the bottom and up based on researchers' discussions rather than on the opinion of administrators. Still, the focus of discussions was on form, not content.

Johannes Bock of the Society consequently met with the Medical Board of Rigshospitalet which offered to establish a council consisting of Johannes Bock (the Scientific Council), basic cancer researcher Keld Danø (the Finsen Laboratory), basic cancer researcher Elisabeth Bock (the Medical Faculty), Mogens Spang Thomsen (Copenhagen University pathologist appointed by the dean of the Med. Fac.), and the director of Rigshospitalet Klaus Petersen, Rigshospitalet's oncologist Mikael Rørth, and Rigshospitalet's professor John Philip⁶¹¹. The council was established for the purpose of reviving the Finsen project and preventing the State from selling off all of the Finsen area to buyers who could be expected to use the grounds for purposes other than cancer research and thereby forever kill the dream of a centre. The new council had to work fast and secretly met on February 8th. In fact, the meeting was so secret and sudden that Bock did not have time to inform all the members of his Scientific Council until after the meeting. He acted with the approval of the Society's Chairman, Bent Harvald⁶¹².

At the meeting, the council worked out a rescue plan to create a Finsen Park in which all parties had equal ownership. The plan was based on Danø's model in which the State would reserve approximately 20% of the Finsen area for a cancer research centre⁶¹³. In this way, the proposed cancer centre would consist of the Society's research building as well as the proposed reserved (and State-owned) buildings. The following day, the plans were presented to the Minister of Health, Ester Larsen, who consequently initiated a discussion of the possibility of establishing a "Finsen Park" with the political management of the originally involved planning parties (including administrators such as Ole Bang). But although the model proposed by the researchers was the reason why the parties even met again, Ester Larsen did not plan to put it into practice. In the words of Bent Harvald, who was present at the meeting:

⁶¹¹ Letter from Johannes Bock to the members of the Scientific Council, February 8th 1990. *Personal papers of Jes Forchhammer, (Bagsværd)*. p. 2.

⁶¹² Ibid.

⁶¹³ Ibid.

Larsen, T. and H. Thomsen (1990) "Fejden om Finsen" *Jyllands Posten* 09.02.1990

The Cancer Centre That Never Was

During the following negotiations, the Minister declared unequivocally that the government could not contribute financially to the centre plans although the plans of establishing a cancer research centre had her full sympathy. As a consequence thereof, the State did not want to be co-owner of the buildings of such a centre. The Minister of Health stressed that her job in relation to the Finsen area was to carry through a property transaction for the State at the best possible price.

On the basis of the Society's decision to withdraw its offer to buy the entire Finsen area, the Minister informed us that she was prepared to recommend further negotiations with the Society about buying part of the area, if this would contribute to the establishment of the cancer research centre.⁶¹⁴

In addition, the Minister informed the Society that she had met with the other negotiation parties to determine their need for laboratory space and their ability to finance it. As it turned out, neither of the parties were willing or able to pay rent for their research activities, and they could only make small contributions to the modernisation and equipment of the labs. In other words, the research centre would only come about if the Society financed the acquisition and renovation of the entire building stock and paid the basic expenses for the operation of the centre as well. This was far from the model proposed by the researchers as the government was not willing to contribute with anything but its sympathy in addition to what was already contributed through the core budgets of the universities and hospitals and as grants-in-aid from the MRC and the NSRC⁶¹⁵. The Society regained leverage, and for a brief moment it was out of the firing line, as it could hardly be held morally obliged to establish and finance a cancer centre massively influenced by public institutes, when no State or other public organs felt morally inclined or able to participate financially.

It would have been a great political victory for Ester Larsen if she had brought the parties to an understanding and made them establish a cancer centre without any additional financial aid from the government. However, the power balance between the Cancer Society and the public negotiation parties was askew, and the researchers' attempt to change this by getting the Ministry of Health financially involved failed when the minister refused to contribute with additional funds. The Ministry of Health had been the only agency able to even out the power balance by contributing financially to the centre and be on an equal footing with the Cancer Society. However, with the Minister's decline, the cancer field was still dominated by the private cancer organisation and this catalysed a new reaction from the publicly-employed

⁶¹⁴ Report of the Chairman to the Society's Head Board, February 14th 1990. *Personal papers of Ole Bang, (Copenhagen)*, p. 12.

⁶¹⁵ NN. (1990) "Der forhandles igen om Finsen-området" *Berlingske Tidende* 15.02.1990, p. 5.

The Cancer Centre That Never Was

researchers, who had to find new ways of ensuring themselves some measure of influence: the management of the centre.

The Head Board of the Society discussed the Minister's offer intensely. If the Society agreed to the new terms, it meant a significant financial burden and responsibility. And even so, it was not known whether or not the other negotiation parties were still interested in a research centre owned entirely by the Society, but governed by the type of management agreed on in the Rockefeller negotiations back in 1984. There were still considerable differences in what the different negotiation parties felt was at the heart of cancer research (clinical vs. basic research problems), and as Keld Danø had pointed out in an appendix to the 1984 report on the Rockefeller Centre, the nature of the poly-institutional centre management held the implicit risk that the involved institutes did not share the same vision for the cancer centre, and that the individual visions were incompatible and would prevent the centre from functioning as a unit. Would it even function in practise?

As mentioned in the previous chapters, the University and Rigshospitalet did not see eye to eye on research administration, and none of them shared the Society's need for asset management and publicity. However, the members of the Head Board finally agreed to continue negotiations with the Ministry of Health about buying the northern part of the Finsen area in spite of this⁶¹⁶. This is perhaps not surprising given that the Society's objective had always been to acquire and invest in real estate as a way of protecting its capital against inflationary pressure. So in a path dependence perspective, it was no surprise why the Society would continue down the path of the cancer centre – to practice its investment strategy – nor is it surprising that the financially pressed public negotiating parties followed suit. And the fact that it was done with so little regard for discussing the content and scientific viability and benefit of the centre model in the face of alternatives (as offered by Inge Henningsen and the Kjeldgaard Report in chapter 3) implies that the “centre” was a means to other ends than coordinating Copenhagen cancer research.

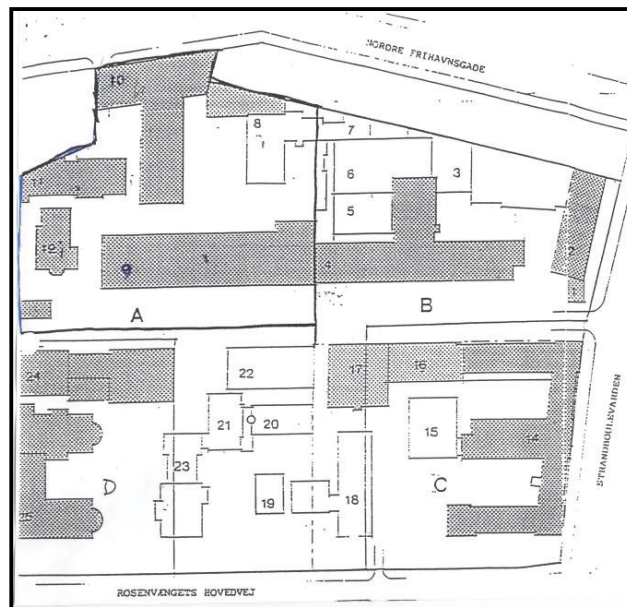
On February 22nd 1990, the process resulted in a new model for the structure of the centre, and it was presented to the other negotiation parties. The new model was welcomed by all parties. The proposed centre was independent of the Society in the sense that its various public and private research labs were autonomous and run by different institutes, and that the management and

⁶¹⁶ The Chairman's report to the Cancer Committee May 20th 1990. *Personal papers of Ole Bang*.(Copenhagen), p. 14.

The Cancer Centre That Never Was

scientific board consisted of representatives of all the involved institutes and researchers, respectively⁶¹⁷. In essence, the administrative structure of the centre would be just like that of the Rockefeller centre, (see chapter 4). Although the Society was the main funding organ, it did not demand proportional influence in the management, and this was welcomed by the publicly held research groups and institutes. On the condition that the State sold buildings 8, 9, 11, and 12 at the Finsen area to the Society, the cancer centre would consist of 13.000 m², see figure 5-2. At the first stage of the establishment, the centre would house the Society's Cancer Registry and the Fibiger Institute, Rigshospitalet's Finsen Laboratory and the secretariat of the Danish Breast Cancer Group, but the Society planned to offer 6,500 m² to other interested research groups later on⁶¹⁸.

Figure 5-2: Outline of the relevant northern part of the Finsen grounds (square A)



Note: The upper left square (A) of the drawing is the part of the Finsen campus the Society was offering to buy. Building 10 was already owned by the Society and it housed the Fibiger Institute.

Source: The centre proposal of February 22nd 1990.

The negotiation parties wrote a note about the proposed structure of the cancer research centre, and they all signed it on February 22nd 1990⁶¹⁹. Johannes Bock of the Society went to the press with the good news:

⁶¹⁷ Note on the establishment of a cancer research centre in Copenhagen, February 22nd 1990. Archives of the Danish Cancer Society, (Copenhagen). p. 1-3.

⁶¹⁸ Newsletter of the Danish Cancer Society, March 1990. Personal papers of Jes Forchhammer, (Bagsværd). p. 1.

⁶¹⁹ Ibid.

The Cancer Centre That Never Was

All the meeting participants agree that it is a good solution which will infuse Danish cancer research with extra strength and drive. The organisation [the Society] will unconditionally pay the State DKK 40-50 million to take over part of the Finsen area. Then, it will invest DKK 40-50 million in the fitting-up of research laboratories; and in addition, we will pay the rent and yearly operation expenditures, approximately DKK 5-6 million. The scientists who move into the Finsen Park must be approved by either the University, Rigshospitalet, the MRC or the Cancer Society.⁶²⁰

It seems as though Johannes Bock deliberately tried to underline the democratic structure of the new centre, given that the Society had previously been accused of monopolising and dominating Danish cancer research. His comment that the University, Rigshospitalet, the MRC or the Society was to decide which groups to accommodate was not entirely true, however. It was the autonomous centre management with representatives from these institutes who were in charge of such decisions, and this worried the head of the Society's Scientific Department, Erik Amdrup, who had not been present at the negotiation table:

The dream of such a centre included – at least in my opinion – Danish and perhaps international research groups of international standard. It worries me that according to the meeting minutes, the centre negotiations have been focused on creating a rather bureaucratic structure while the means to secure the quality of the centre's research has hardly been mentioned. The project will initially cost a hundreds of millions, and the future operation of the centre will cost several millions per year. It is the most costly investment/project that the Society has ever financed. I had hoped that applications for moving into the centre were to be evaluated by an independent scientific committee (the Scientific Council or externally), and that the project would be monitored and occasionally evaluated by the ISAC along the way. It is no doubt comfortable for the departments in question to move closer to each other, but there is no guarantee that the improvement of their research efforts is worth the money spent. In the future, it would be prudent to be able to document the success of the project to the donors.⁶²¹

Erik Amdrup was right worrying about the lack of scientific planning in the centre and about the management models repercussions for the Society. The constitution of the new centre management meant that the representatives of the Danish Cancer Society were outnumbered by the representatives of publicly held institutes, and they risked being outvoted on central issues such as the scientific profile of the centre. Compared with the Society's aggressive attitude at the January meeting of 1989, this surrender of power seemed a bit odd. Naturally, the Society's strategy to use the media to push for a sale of the Finsen grounds had backfired, and the cancer charity could not afford more of the bad publicity it had suffered from the press-mediated attacks. But did the Society capitulate and give up influence on the most costly project it had

⁶²⁰ Kjærgaard, J. J. (1990) "Internationalt kræft-center" *Berlingske Tidende* København 24.02.1990, p. 2.

⁶²¹ Letter from Erik Amdrup to Ole Bang and Johannes Bock, March 7th 1990. *Personal papers of Jes Forchhammer*, (Bagsværd). p. 1.

The Cancer Centre That Never Was

ever embarked on just to restore its reputation? It does not seem likely – but it is certainly possible – that the management of the Society was willing to go to great lengths to secure the Finsen area to protect the capital of the cancer charity, and that a total dominance of the centre's activities was not as important as actually establishing a cancer research centre and restoring the trust of the donors. But did the Society hand over the reins? No! In April 1990, Bent Harvald and Ole Bang called on the other negotiation parties to discuss the adding of a supplement to the February proposal for the management and structure of the cancer research centre:

It is hereby announced that in principle the Society adopts the parties' consensus on the described collaborative framework, given that the Society may assume that any decision made in the centre management will be made unanimously in order to secure the highest quality in the centre research. In reference to the proposal, the Society points to the fact that the management decides which new cancer research units to place in the centre, which ones to reduce/terminate, and how to allocate the space in the centre.⁶²²

In the entire history of planning for a Danish cancer centre, unanimous decision-making had been a rare sight. The Society's new condition would probably prevent a centre management from deciding anything at all. As mentioned above, the institutes held different and sometimes incompatible views on central points (the definition of cancer research, the administration of research, and the need for publicity), and this could effectively rule out consensus decisions. So after lengthy discussions on May 14th 1990, the negotiation parties concluded that only decisions regarding which groups to move into the centre should be unanimous. Also, no institute could be financially obliged against its own will because of a majority vote in the management⁶²³. The parties therefore seemed to agree on the structure and management of the proposed cancer research centre, and all that was left was the actual acquisition of the buildings.

The Ministry of Health and the Folketing's Privatisation Council wanted to sell the northern part of the Finsen area to the Danish Cancer Society for DKK 90 million, whereas the cancer charity wanted to pay no more than DKK 60 million. The Society hired a real estate agent to give an impartial appraisal of the building stock, and the agent estimated the buildings at a price of DKK 65 millions. In addition, the agent argued that the price would probably be much lower if the Ministry of Health tried to sell the buildings by calling for tenders, as there were certain

⁶²² Letter from Ole Bang and Bent Harvald to the Head of Copenhagen University, the management of Rigshospitalet, and the Research Directorate. April 10th 1990. *Personal papers of Jes Forchhammer, (Bagsværd)*. p. 1.

⁶²³ Supplement to the proposal on the establishment of a cancer research centre, May 14th 1990. *Personal papers of Jes Forchhammer, (Bagsværd)*.

The Cancer Centre That Never Was

restraints on what the grounds could be used for⁶²⁴. According to the planning and building regulations of the City of Copenhagen, the area could only be used for non-profit activities for the common good, and this drastically reduced the number of potential buyers⁶²⁵. The Privatisation Council subsequently announced that it was willing to sell the grounds to the Society at a price of DKK 75 million, on the condition that the establishment of the cancer research centre would be put into practice and governed in the manner in which the negotiation parties had agreed on February 22nd 1990⁶²⁶. In this way, the Folketing tried to reinflct the Society the moral responsibility of establishing this type of cancer centre, in spite of the fact that such a demand could not legally or morally be part of a traditional transaction such as a sale of the Finsen if the sale was done in open tendering, even though the result of the tendering process could be much lower bids than the asking price.

In April 1990, the Cancer Society's Head Board discussed the Privatisation Council's latest move and decided to stand by their initial offer of DKK 60 million, and it informed the Minister of Health that the Society would make a public bid on the grounds, if the Privatisation Council did not accept the latest offer and decided to put the Finsen grounds up for sale in open tendering. This evoked a lot of anger on the part of one prominent member of the Privatisation Council, Arne Melchior, who found the Society's latest offer scandalously low and considered cancelling his membership of the cancer charity⁶²⁷. According to the logic behind the the formal institutions girding the government's privatisation-trend and desire to make the public sector transact on market conditions, the Society's actions would absolutely make sense. This was true from the perspective of its commission to serve the anti-cancer cause by spending the collected funds/contributions responsibly. Why pay overprice? Why not play the market? Melchior's outburst can only be seen as yet another attempt to drag the Society and the sale of the Finsen campus out of an arena girded by business logic, market conditions and contractual legal enforcement and into an arena of more diffuse subjective morality, increasing the Society's vulnerability.

In this way, the sociological mechanisms behind these attempts to shift battlefields mirror the perception of the Society's own transition from modest physician dominated charity to a modern DJØF-led organisation and the discussions of whether or not such a change was suitable for

⁶²⁴ The Chairman's report to the Cancer Committee May 20th 1990. *Personal papers of Ole Bang, (Copenhagen)*. p. 15.

⁶²⁵ Tolderlund, S. (1990) "Finsen-området næsten rømmet" *Berlingske Tidende* København 21.07.1990, p. 2.

⁶²⁶ Ibid. The supplement to the proposal for the centre's management and structure was added a month later.

⁶²⁷ NN. (1990) "Kræftens Bekæmpelse afviser pris på Finsen" *Berlingske Tidende* 18.03.1990, p. 10.

The Cancer Centre That Never Was

charity work. The Privatisation Council eventually decided not to accept the Society's offer and put *the whole* area up for sale in open tendering. The process took time because of bureaucratic difficulties and confusion on the decision-making authority of the Ministry of Finance and the Ministry of Health in this matter⁶²⁸. Also, the Ministry of Health was interested in changing the planning and building regulations for the City of Copenhagen, so that the Finsen grounds could be used for purposes other than non-profit activities⁶²⁹. This was of course an attempt to attract more buyers and push up the price of the Finsen area, but the Ministry of Health did not have the mandate to change the regulations by itself – this was the domain of the City of Copenhagen. The Finsen grounds were finally put up for sale in open tendering in October, and potential buyers had to make their bid before mid-December. Although the Ministry of Health now wanted to sell all areas of the Finsen grounds, and not just the northern part, the Society was still interested. It placed a bid for DKK 140 million, and this was the exact same offer it had made when it first started planning for a private cancer research centre. Two other bids were made:

- a) DKK 150 million from Kay Wilhelmsen Holding. The firm wanted to build flats at the grounds and rent laboratory space to the Danish Cancer Society.
- b) DKK 10 million from a building association that wanted to buy part of the area for senior housing⁶³⁰.

The two competing offers could only be considered if the City of Copenhagen agreed to bend the rules for the use of the Finsen area. Given that this process would be of long duration and that the operation costs of the Finsen area amounted to almost DKK 2 million a month, the Danish Cancer Society held a strong position. On March 22nd 1991, the Society's offer was discussed at a meeting in the Folketing's Privatisation Council, but the Council never reached an agreement on whether or not to sell the Finsen area to the cancer charity. According to Chairman Bent Harvald, the Society was informed that the reason for this was that one of the council members had requested legal advice on whether a sale would pledge the Society to establish a cancer research centre at the Finsen grounds in accordance with the centre proposal of February 22nd 1990⁶³¹. To the management of the Society, only one scenario was conceivable: the Society was not obliged to establish a centre. In the words of Bent Harvald:

⁶²⁸ Tolderlund, S. Ibid.: "Finsen-området næsten rømmet" København 21.07.1990, p. 2.

⁶²⁹ Ibid.

⁶³⁰ POL (1990) "Kræftens Bekæmpelse" Politiken København 15.12.1990, p. 9.

⁶³¹ Chairman's report to the Head Board, April 10th 1991. *Personal papers of Ole Bang, (Copenhagen)*. p. 16.

The Cancer Centre That Never Was

The Head Board's position on this issue was clearly voiced at our meeting on May 15th 1990, when it was stated that any promise regarding the Finsen Park would be based on the document from February 22nd 1990 only. It was unacceptable to link the described collaborative framework – which the Society, along with the other collaboration partners, had agreed to in principle – with the conditions of a sale [of the Finsen area]. As everybody recalls, this was the decisive condition that made the Society refrain from buying the Finsen area from the State without open tendering. By buying *in* open tendering, the question of linkage no longer applies. Otherwise, the requirement to establish a cancer research centre should have been entered as a condition in the tender material.⁶³²

On April 4th 1991, the Minister of Health issued a note to the Privatisation Council regarding the sale of Finsen. She agreed with the Society that a sale of the Finsen area would not obligate the cancer charity to build a cancer research centre. Furthermore, the Minister and her legal advisors acknowledged that the proposal of February 22nd 1990 was a declaration of intent rather than a binding legal document, although signed by Ole Bang and Johannes Bock⁶³³. The Minister even considered the proposal to be a party truce after lengthy political posturing in the media⁶³⁴. According to the Minister, the situation had changed since the proposal was first written. Back then, the Society was planning to buy only part of the Finsen area at an affordable price that would allow the cancer charity to finance most of the proposed centre as well. Nevertheless, the situation changed considerably when the State sold the entire Finsen area in open tendering with no special cancer research centre clauses and at a much higher price. In conclusion, the Minister informed the Privatisation Council that the Society was *not* bound by the proposal or the establishment of *any* kind of cancer centre. It was thus free to do whatever it wanted with the Finsen buildings for business purposes – be that the establishing of a cancer research centre, the renting of some of the buildings to other businesses etc. The Society could pursue whatever means to serve the anti-cancer cause in the sense that it would optimise the Society's income and make its investment profitable for the sake of continued survival.

The Society had succeeded in buying the Finsen campus without the constraints of any “moral clause”. However, the continued success of the organisation's investment strategy depended on – yet again – a positive media and public perception of whether or not the organisation lived up to its objective of serving the anti-cancer cause responsibly. Because even though the cancer charity had succeeded in separating an economical transaction from political (moral) agendas, the organisation still suffered the consequences of once having let itself be dragged into a battle

⁶³² Ibid.

⁶³³ Note from the Ministry of Health to the Privatisation Council, April 4th 1991. *Archive of the Danish Cancer Society*, p. 1-3.

⁶³⁴ Ibid, p. 3.

on moral fibre in the beginning of the negotiations. The can of worms had not yet been resealed, and the public researchers and other critical voices could still revive the media debate against the Society if they felt deprived of influence over the centre, or if the Society tried to defect from the centre plans yet again.

5.6 The drawbacks of corporate charity

Even if the Society enjoyed temporary political support from the government, it was attacked once more by cancer researchers through the press. Along with an alleged number of 320 cancer researchers, Dr Jørgen Rygaard from the Copenhagen Municipal Hospital established a competing cancer charity in April 1991. According to Rygaard, the reason for doing so was a growing discontent with the Society, which had become all too commercial and no longer lived up to the humble ideology of a humanitarian organisation⁶³⁵. In a series of newspaper articles e.g. "Researchers rebel against the Cancer Society" and "The Society is too commercial", Rygaard informed readers about the new cancer organisation, which in contrast to the Society would not sit on its coffers and invest to amass a "huge pile of money" – quite the contrary. The new organisation would function as a foundation and channel all its collected money directly into cancer research, not administration. And according to Rygaard, the new initiative was backed by what appeared to be the entire cancer community in the form of 320 cancer researchers:

We feel that the Cancer Society has become too commercial. We saw it during the negotiations for the cancer research centre at Finsen where the atmosphere was characterised more by business considerations than by the positive and optimistic tone one could have expected from negotiations about a research centre. (...). We want to form a supplemental association, and we will make sure that donations are channelled into research without unnecessary delay. The Cancer Society spends money on many other things, and researchers have reservations about the construction of a large empire such as the Finsen as it has not been possible to obtain clear agreements about the management structure.⁶³⁶

The name of the new organisation was "*The Danish Cancer Research Foundation*" (DCRF), which was backed by the Danish Medical Oncology Society and the Danish Cancer Research Association. If the DCRF was in fact formed and supported by 320 cancer researchers, it would mean that almost all cancer researchers in the country were opposed to the Danish Cancer

⁶³⁵NN. (1991) "Kræftens Bekæmpelse er for kommerciel" Ekstra Bladet 29.04.1991, p. 23.

Tolderlund, S. (1991) "Forskere i åbent opgør mod Kræftens Bekæmpelse" Berlingske Tidende København 29.04.1991, p. 4.

⁶³⁶NN. (1991) "Kræftens Bekæmpelse er for kommerciel" Ekstra Bladet 29.04.1991, p. 23.

The Cancer Centre That Never Was

Society, and this was indeed a powerful message to the Folketing's Privatisation Council which was to decide whether or not to accept the Society's bid on the Finsen area. The 320 cancer researchers were in fact equal to the exact number of members in the two professional associations, the Danish Oncology Society and the Danish Cancer Research Association, but it is far from certain that they were all for the initiative. It has not been possible to document whether the decision to back the new foundation was unanimous or based on a majority vote. The cancer researchers of the Danish Cancer Society were also members of one or both of the associations, but they are not likely to have supported the idea of a competing cancer charity. It was later claimed by the Society that only a small percentage of the members of the professional association actually agreed to the new initiative⁶³⁷. If this was true it meant that Rygaard had used the name of the two associations to boost the credibility of the new foundation.

The newspaper articles did not reflect such nuances, however, maintaining as they did a juxtaposition between the Society and *all* Danish cancer researchers, and this was the message that came across to the average reader. Danish politicians were affected as well, and even though the Minister of Health had no reservations about selling the Finsen area to the Society, some of her colleagues did. The Folketing's Finance Committee wanted to postpone the sale of the Finsen area yet again as it worried that the Society would fail to keep the centre agreement of February 1990, and end up building a private centre on which the State and other public organs would have no influence at all⁶³⁸. This in spite of the fact that a centre and the Finsen sale were in no way linked legally, and the Privatisation Council therefore had no mandate to dictate the use of a lot bought in open tender with no "centre-clause" in the tendering material. The matter caused a great deal of commotion and outrage in the press, and this surprised the chairman of the Society:

The odd thing about this matter is that we are not buying the Finsen area for any other reason than the establishment of a research centre. We merely wish that the purchase should be separated from the collaborative agreement that does not legally bind us to anything.⁶³⁹

Still, the image of the Society was tainted by the press and the critical cancer researchers, and a series of unrelated accusations against the private cancer charity was suddenly morally linked

⁶³⁷ Autrup, H. (1991) "Marionetterne" Berlingske Tidende 23.10.1991, p. 10.

⁶³⁸ Tolderlund, s. Ibid.: "Kræftens Bekæmpelse står fast på Finsen-aftale" København 16.05.1991, p. 6.

⁶³⁹ Ibid.

The Cancer Centre That Never Was

with the sale of the Finsen area⁶⁴⁰. The establishment of the alternative cancer research foundation had made people question what the Society was in fact spending all its money on. Research? Administration? Strategic investments? While Ole Bang and his colleagues had used the promise to establish a cancer research centre as leverage to acquire the Finsen grounds, a small group of critical researchers (Danø, Elisabeth Bock) and politician Arne Melchior used the sale of the Finsen grounds as leverage against the Society in order to pressure the organisation into establishing a cancer research centre with a scientific management that would give substantial influence to the publicly employed researchers. This had successfully been done when the Society opted to force the Privatisation Council to use the exemption clause of selling the Finsen campus at a potentially lower price to a worthy cause, but this time the bid was made

⁶⁴⁰ An indicator of the minimum extent of the press coverage is the number of articles, I have been able to find via media databases by entering words such as "Cancer Society" and "centre". From January 1991-January 1992, I found 42 articles in which the Society was either accused of indecent strategies regarding the purchase of the Finsen grounds, of poor administration in general, or of not having intentions of establishing a cancer research centre. In other articles, the Society's management or other representatives and supporters defended the Society against these accusations: Autrup, H. Ibid.: "Marionetterne" 23.10.1991, Bang, O. (1991) "Arne Melchior tager fejl" Berlingske Tidende 17.10.1991, Bjerre, M. (1991) "Keld Danøs tarvelige talmagi" Berlingske Tidende 17.10.1991, Bock, E. (1991) "Sandheden tak!" Berlingske Tidende København 11.10.1991, Bock, E. (1991) "Sandheden om en sandhed" Politiken København 18.10.1991, Danø, K. (1991) "Mindst 47 millioner til administration" Berlingske Tidende København 22.05.1991, Danø, K. (1991) "Regnskabsudlægningen i Kræftens Bekæmpelse er kreativ" Berlingske Tidende København 13.10.1991, Danø, K. (1991) "Sådan bør Kræftens Bekæmpelse reorganiseres" Berlingske Tidende København 24.10.1991, Danø, K. (1991) "Kun en femtedel til kræftcenter" Berlingske Tidende København 05.12.1991, Danø, K. (1991). "Svar." Ugeskrift for læger 153(49): 3502-3504, Døllner, T. (1991) "Store penge koster penge" Politiken 25.10.1991, Gardel, U. (1991) "Strid om salget af Finsen blusser op" Berlingske Tidende København 21.10.1991, Harvald, B. and E. Amdrup (1991). "Kampagnen mod Kræftens Bekæmpelse." Ugeskrift for læger 153(49): 3500-3505, Kassebeer, S. (1991) "Ny forhandling om Finsen Parken" Berlingske Tidende København 28.09. 1991, Kassebeer, S. (1991) "Stadig håb for den ny Finsen-parken" Berlingske Tidende København 27.09.1991, Kassebeer, S. (1991) "Borgmester forlader to hovedbestyrelsesposter" Berlingske Tidende København 18.10.1991, Kieler, J. (1991) "Løgn fra sandhedens vogtere" Politiken 25.10.1991, Kieler, J. (1991) "Det er Herman Autrup der manipulerer" Berlingske Tidende 29.10.1991, Melchior, A. (1991) "Ny ledelse af Kræftens Bekæmpelse" Berlingske Tidende 11.10.1991, NN. (1991) "Kræftens Bekæmpelse er for kommerciel" Ekstra Bladet 29.04.1991, NN. (1991) "Klar til at rykke ind på Finsen" Berlingske Tidende 27.05.1991, NN. (1991b) "Uro om center på Finsen" Politiken 16.09.1991, NN. (1991) "Arne Melchior: Uanstændige metoder" B.T. 04.10.1991, NN. (1991) "Arne Melchior forlader Kræftens Bekæmpelse i protest" Ritzaus Bureau 01.10.1991, NN. (1991) "Kræftpenge spildt på administration" Berlingske Tidende 13.10.1991, NN. (1991) "Kræft-kritik afvises" Berlingske Tidende 14.10.1991, Pedersen-Bjergaard, J. (1991) "En kamp om magt og penge" Politiken København 10.10.1991, Pedersen-Bjergaard, J. (1991) "Hvem fik de 46 millioner?" Politiken København 21.10.1991, Pedersen-Bjergaard, J. (1991). "Svar." Ugeskrift for læger 153(49): 3504, Rygaard, J. (1991). "Svar." Ugeskrift for læger 153(49): 3504-3505, Stærbo, L. (1991) "Staten er skurken i kræftforskningen" Universitetsavisen 31.10.1991, Sørbø, K. (1991) "Salg af Finsen nu godkendt" Berlingske Tidende København 23.05.1991, Sørensen, T. I. A. (1991) "Mistilliden må fjernes" Politiken København 10.12.1991, Tolderlund, S. (1991) "Kræftens Bekæmpelse står fast på Finsen-aftale" Berlingske Tidende København 16.05.1991, Tolderlund, S. (1991) "Forskere i åbent opgør mod Kræftens Bekæmpelse" Berlingske Tidende København 29.04.1991, Espersen, B. T. and A.-L. Roager (2008). Det vidunderlige stof, Aarhus Universitetsforlag, Espersen, B. T. and A.-L. Roager (2008). Det vidunderlige stof, Aarhus Universitetsforlag, NN. (1991) "Kræftens Bekæmpelse er for kommerciel" Ekstra Bladet 29.04.1991, Larsen, H. (1991) "Kræftstrid i hårdknode" Berlingske Tidende 04.10.1991, Larsen, H. (1991) "Kræftforeningen afviser enhver kritik" Berlingske Tidende 13.10.1991, Kassebeer, S. (1991) "Finsen-drøftelse udskudt" Berlingske Tidende København 07.11.1991, Brincker, H. (1991) "Dyre ord" Politiken 17.11.1991.

The Cancer Centre That Never Was

on equal terms with other bidders and with no such clause. In fact, any politician's attempt to link the sale and the establishment of the centre would be on legally thin ice and should have resulted in heavy public criticism. But it did not.

Proposing such a linkage bore no risk of legal ramifications for the critical researchers, though. They were once again using the sale as a tool to restructure the field of power – that is to change the power-balance by forcing the Society's management to their knees. Their actions were shaped by this power balance, and since the former Minister of Health had passed on the chance to level out this balance by contributing financially to the centre on an equal footing with the Society, the researchers had to find other strategies to rally up allies (politicians from the Privatisation Council, the public) to secure a scientific management and influence. But now that the present Minister of Health, Ester Larsen, had stated that the Society was not obliged to establish a cancer research centre if it acquired the Finsen grounds, the researchers had to change tactics again, and the press-mediated criticism therefore slowly changed nature: it was targeted at the structure and management of the Society itself.

Heine Høi Hansen had previously pointed out to the Scientific Council that the annual budgets were unclear as to how much money the Society actually spent directly on cancer research projects, and other critical voices had complained about the non-transparent lines of decision-making within the Society. And Danø used the press to portray the cancer charity as a notoriously secretive and undemocratic empire that almost conducted accounting trickery and was no longer being true to its origin as a popular anti-cancer movement⁶⁴¹. Danø also attacked the consolidation policy of the charity as the bond holdings of the Society amounted to DKK 623 million, and according to Danø, this was far more than needed to protect the capital against inflation and to secure the continuity of cancer research in the country. Furthermore, Danø criticised the configuration of the charity's annual budgets as they were non-transparent, and he claimed that the budgets showed that the organisation spent too much on administration compared to what was spent on research⁶⁴².

If this was true, the Society had misused the donations and trust of the public, as it was considered good form to keep administration expenses to a minimum in humanitarian organisations. The management of the Society naturally retorted in the press where it appealed to the public saying that their money was well spent on research and not on excessive

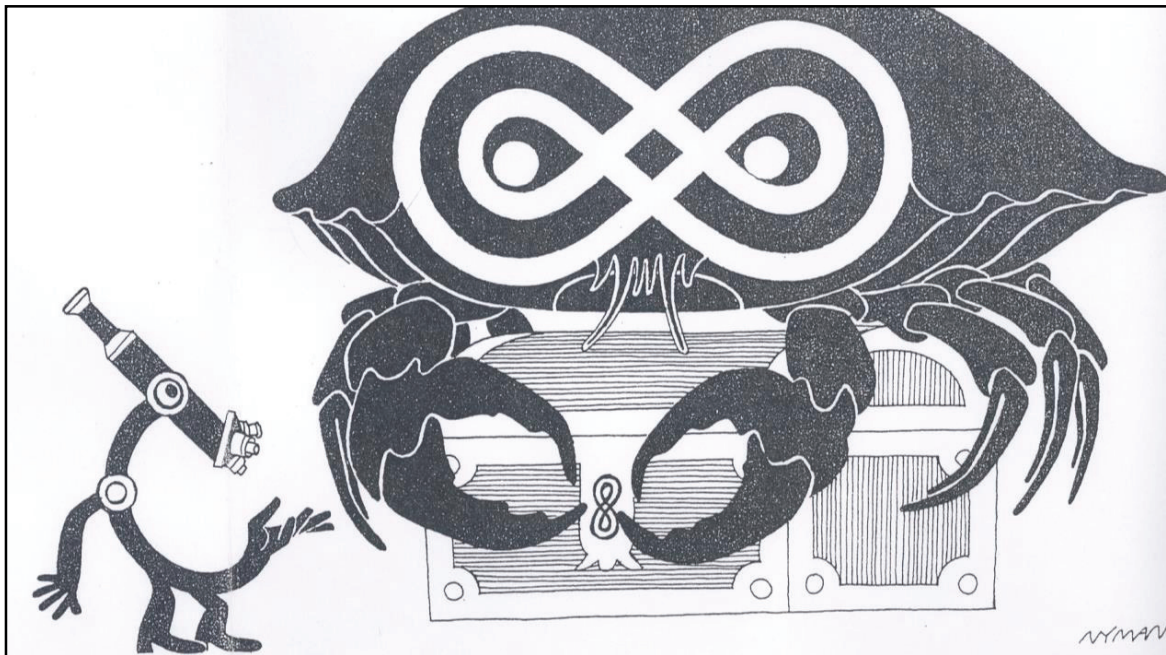
⁶⁴¹ Danø, K. (1991) "Mindst 47 millioner til administration" Berlingske Tidende København 22.05.1991, p. 10.

⁶⁴² Ibid.

The Cancer Centre That Never Was

administration, that the design of their budgets was standard, and that Danø had simply made a miscalculation when he presented the faulty figures.⁶⁴³ Danø replied by stating that he had been an apprentice accountant before he became a researcher, and that he was thus more than capable of analysing a budget. The debate went on for a long time, and the cancer organisation was in danger of suffering the drawbacks of corporate charity.

Sociologist Bourdieu favours the use of sports analogies to describe the dynamics of social fields. In this context, the Society was constantly forced to play a game in which the court and the rules were constantly changing to its disadvantage. Being forced to play tennis with golf clubs so to speak. Constantly finding itself at another turf and under different rules than presupposed. The Society was forced to play the “moral” game, even though its actions were only warranted in an entirely different world and by sets of rules such as law and market that was not acknowledged by the Society’s opponents and the third party enforcement. A group of cancer researchers were constantly trying to undermine the Society’s image and power, and the Achilles heel of the private cancer charity was in fact its image (for an impression of the campaign’s effect on the Society’s income, see figure 4.1, chapter 4). If the public did not believe their money was spent right by the Society, they would stop donating or go to the competing cancer foundation – the DCRF.



⁶⁴³ Bjerre, M. Ibid.: "Keld Danøs tarvelige talmagi" 17.10.1991, p. 11.

The Cancer Centre That Never Was

Newspaper drawing (Politiken, 1992): The Danish Cancer Society is drawn as a crab/cancer sitting on its coffers while researchers plead for money for their activities. The lines around the crab's eyes depict the logo of the Society.

Meanwhile, the tumultuous events affected the Danish Folketing's Finance Committee as well, as the members asked the Minister of Health about her stand on the sale of the Finsen area. She assured them that the Society would establish a cancer research centre managed according to the proposal of February 22nd 1990⁶⁴⁴. According to the Minister, the Society's Chairman had affirmed this over the phone on April 19th 1991⁶⁴⁵. The Finance Committee regarded this conversation as an oral agreement to establish a centre and had no further objections to the sale⁶⁴⁶. On May 22nd 1991, the entire Finsen area was sold to the Danish Cancer Society.⁶⁴⁷ The fact that the Minister, the Finance Committee, and the Privatisation Council even had such discussions and made conclusions regarding the sale of Finsen – even though they could not legally make any such demands – bears witness to a widespread attitude towards what a charity should be and how it should act from a moral point of view. It is very doubtful that the State representatives would have made similar demands of legally groundless moral demands to e.g. a private pharmaceutical company bidding on the campus which did not in the same way as a charity depend on its image and private contributions. Even though the Cancer Society was private and run like a private business, it was certainly not judged or treated by the same set of standards as a private business.

5.7 So close, so far

The Society had bought 35,300 m² of building stock, and the organisation could not possibly use all of this space for the centre. The Society's Executive Committee therefore planned to reserve 17,700 m² for the Danish School of Design, which was interested in renting offices in the Finsen area⁶⁴⁸. 4,600 m² were used for the Society's Head Office and Advisory Centre, while 13,000 m² were reserved for the actual cancer research centre. The Society had assured the extramural researchers that the centre would be governed according to the management

⁶⁴⁴ Ester Larsen's answers to the Finance Council, May 21st and 22nd. *Archives of the Danish Cancer Society (Copenhagen)*. p. 2.

⁶⁴⁵ Ibid.

⁶⁴⁶ Sørbo, K. (1991) "Salg af Finsen nu godkendt" *Belingske Tidende* København 23.05.1991, p. 6.

⁶⁴⁷ Letter from Ole Bang to the Head Board, May 23rd 1991. *Archives of the Danish Cancer Society. (Copenhagen)*. Document from the Ministry of Health May 6th 1991 (signed May 22nd 1991). *Archives of the Danish Cancer Society. (Copenhagen)*.

⁶⁴⁸ Meeting minutes of the Executive Committee-Scientific Council, June 19th 1991. *Personal papers of Ole Bang, (Copenhagen)*.

The Cancer Centre That Never Was

model agreed upon in the document of February 22nd 1990, and this had calmed down the critical press coverage⁶⁴⁹. However, the Society's Scientific Council members were not unanimous in their support of the management model. One member worried that the collaboration between the proposed Supervisory Board (administration) and the Coordination Council (scientific profile) would be impeded, given that the Supervisory Board had the mandate to decide which scientific groups to include in the centre⁶⁵⁰. Or in other words: would the New Public Management trend from the hospitals and the business strategies of the Cancer Society infiltrate the centre and allow non-scientific and non-medical personnel to make such important decisions?

This was a very important decision that would affect the centre's scientific profile. Should the political and administrative management have such power to affect the scientific activities in the centre? The Executive Committee acknowledged the concern and agreed that the principles of the February document were very complicated and might not function in practise. Unfortunately, they could only be changed and simplified if all of the negotiation parties agreed to do so.

The opportunity to discuss these and other questions regarding the planning for the Finsen Park arose when the Society invited the other negotiation parties to a meeting on September 24th 1991. The purpose of the meeting was to find out which extramural research groups were interested in moving into the centre in addition to the Finsen Laboratory and the Secretariat for the Danish Breast Cancer Group which were already part of the plans⁶⁵¹. But the meeting ended in disaster as representatives from the public research organs and institutes walked out of the talks early. Because of this, there is no formal record of the meeting signed by all parties; the only document available is the Society representatives' summary to staff. According to this, representatives from the State-owned Rigshospitalet, the MRC, the NSRC, and the Research Department of the Ministry of Education were not able to list any groups ready to move into the Finsen Park. The Medical Faculty of Copenhagen University presented five groups that were

⁶⁴⁹ NN. (1991) "Klar til at rykke ind på Finsen" *Berlingske Tidende* 27.05.1991p. 4.

⁶⁵⁰ Meeting minutes of the Executive Committee-Scientific Council, June 19th 1991. *Personal papers of Ole Bang, (Copenhagen)*.

⁶⁵¹ Letter from Harvald and Bang to Ove Nathan, Christian Nissen and Peder Olesen Larsen, July 25th 1991. *Archives of the Danish Cancer Society, (Copenhagen)*.

only interested if the Finsen Park would provide them with better laboratory facilities and equipment than at their current location⁶⁵².

As shown in chapter 4, better laboratory facilities was definitely one of the public researchers' incentives to support the establishment of a cancer centre, no matter if – it would seem – the centre had a clearly defined scientific profile/content or not. According to the summary, the University researchers required expensive new apparatus such as electron microscopy facilities, a series of centrifugal separators, and immunohistological facilities in order to even consider moving into the centre⁶⁵³. The Natural Science Faculty of the University reported that many of its researchers had reservations about the entire project and were not interested in moving their activities at all – at least not until the negotiators had appointed members for a suitable board of directors. All in all, the summary reflects that it must have been very important for everyone but the Society's representatives to establish a board of directors.

The Society was represented by Bent Harvald, Ole Bang, and Executive Committee member and lawyer Niels Fisch-Thomsen, and the three of them were far from happy with the proposal. To them, it did not make sense to establish a board of directors without deciding on the rules and regulations for the centre first. According to Bang and Fisch-Thomsen, no other private firm would ever establish a board of directors before making rules to define and/or reduce its decision-making authority⁶⁵⁴. Furthermore, they did not find it reasonable to establish a board of directors when there were, as of yet, no interested publicly held and financed research groups to govern at all.

In other words, the representatives of the Society wanted to discuss and determine the rules and regulations, the scientific content and the profile of the centre before establishing a board, while the other negotiators wanted to establish a board of directors before planning which groups to place in the centre. Obviously, this represented a clash with the private business logic of the Society's management, which the economist Bang and the lawyer Fisch-Thomsen reflected because of their education and job positions, and which physician Bent Harvald respected in his capacity as chairman of the Society, the best interests of which he served. Bent Harvald and Fisch-Thomsen suggested that an interim council should be established for a period of 2-4 years, and that the centre plans should be cancelled if the council could not present clear-cut rules of

⁶⁵² Summary of the meeting on September 24th 1991. *Personal papers of Ole Bang, (Copenhagen)*. p. 2-3.

⁶⁵³ Ibid. p. 3.

⁶⁵⁴ Ibid. p. 8.

The Cancer Centre That Never Was

procedure and a viable scientific profile for the centre within this period of time. The Society now owned the large Finsen area and could not be expected to leave the costly buildings vacant for years, just because the planning process dragged on due to the indecisiveness of the negotiators, when the Society could be renting the space to other (commercial) purposes instead⁶⁵⁵. Given that the parties had now planned for two years and still could not even produce a list of research groups interested in moving into the centre, Bang and his colleagues found that their proposal for an interim council was more than reasonable. And yet, the parties never came to an understanding on the issue, and the State representatives became agitated and left the meeting in anger. The meeting thus reflected the difficulties which the management of the proposed centre might encounter. And even worse; the Washington planning conference on cancer centres (chapter 3) may have been right to recommend that a planning process should follow a certain series of steps faithfully in order to prevent problems like the ones experienced at the Danish meeting and to avoid ending up with a cancer centre without content. An empty shell.

The Society wrote to the other negotiators the very same day with their account of the meeting, and in a press release the cancer charity announced that the plans for the Finsen Park had come to an abrupt halt because no extramural research groups were interested in the Society's "generous gift".⁶⁵⁶ The Society's representatives were under the impression that the other negotiators had a hidden agenda, as the Chairman informed the Head Board on a later occasion:

Given that our negotiation parties were rather impervious for these points of view and dismissed the idea of a council and passionately maintained their demand for the establishment of an actual and permanent board then and there, this demand gave rise to our increasing fear that there is more behind the collaborative partners' violent demand for establishing the board. On our part, we had to ask ourselves if there were completely different and far-reaching intentions behind such claim. This concern was underlined during the events of the meeting, and made it pivotal for the Society's representatives to emphasise to our collaboration partners that the working basis and competence of the board of directors had to be fully defined before the board could be established. Anything else seemed completely irresponsible to us.⁶⁵⁷

According to the Society's representatives, the agenda of the other negotiators was to use the board to achieve influence on the Finsen Park and thus also on a great deal of funds from the

⁶⁵⁵ Ibid. p. 7.

⁶⁵⁶ Press release from the Society, September 26th 1991.

Letter from Harvald and Bang to Ove Nathan, Chr. Nissen, and P.O. Larsen, September 24th 1991, *Personal papers of Keld Danø, (Copenhagen)*. p. 1.

⁶⁵⁷ The chairman's report to the Head Board, October 11th 1991. *Personal papers of Ole Bang, (Copenhagen)*. p. 2-3.

The Cancer Centre That Never Was

Society⁶⁵⁸. The representatives from the publicly-owned institutes, however, were of a different opinion. They refused to recognise the Society representatives' account of events of the meeting. In a letter to the Society's management, they stated that they had in fact presented many interested groups, and that all the participants at the meeting agreed to establish a board of directors in accordance with the document of February 22nd 1990⁶⁵⁹. The discrepancies between the accounts of the Society's representatives and the other negotiators were displayed by the press in a series of articles which cannot have contributed positively to the Society's public image⁶⁶⁰. The Society arranged for a press conference in order to explain the situation, but the press and the critics did not take warmly to it:

The feature was not very informative, with the exception that the Society did not feel obligated to establish a common board of directors with the State partners for the new centre. The Society's director, Ole Bang, pointed out that the Society's proposal for a common research centre was only a proposal in principle. The Society's chairman, Bent Harvald, felt that a comprehensibility gap had emerged.⁶⁶¹

According to the press, the Vice-Chairman of the Society, Niels Fisch-Thomsen, tried to explain the collapse of the meeting between the negotiators in the following manner:

Our collaboration partners were passionate about establishing a board. As a lawyer, this made me suspect that they might have had other intentions than to establish a research centre. In my opinion this may be a struggle for power or money, rather than a matter of establishing a research centre. There is no basis for the establishment of a board until it is likely that there is anything to be in charge of. This is why I suggested the establishing of a council instead.⁶⁶²

Fisch-Thomsen and the rest of the Executive Committee thus seemed to believe that the idea of a research centre had become a power-prop. The idea of the centre was used to achieve influence on the Society's growing fortune, and in the opinion of the committee members the fact that the publicly-employed researchers were so keen on establishing a board of directors before giving any thought to the centre's scientific activities only supported this view. Talks about what the centre was really supposed to be about – cancer research – had receded into the background. Furthermore, the attacks on the Society did not focus on the organisation's role in

⁶⁵⁸ Interview with Bent Harvald, February 1st 2005.

⁶⁵⁹ Letter from O. Nathan, Chr. Nissen, and D. Andersen to the Cancer Society, September 26th 1991. *Personal papers of Keld Danø, (Copenhagen)*.

⁶⁶⁰ Kassebeer, S. (1991) "Ny forhandling om Finsen Parken" *Berlingske Tidende* København 28.09. 1991, p. 2.
Kassebeer, S. (1991) "Stadig håb for den ny Finsen-parken" *Berlingske Tidende* København 27.09.1991, p. 6.
NN. (1991a) "Uro om center på Finsen" *Politiken* 26.09.1991, p. 5.

⁶⁶¹ Pedersen-Bjergaard, J. (1991) "En kamp om magt og penge" *Politiken* København 10.10.1991, p. 8.

⁶⁶² Lundbeck, S. and T. Bagge (1991) "Vi er ikke bedragere" *B.T.* 04.10.1991, p. 22.

The Cancer Centre That Never Was

the planning of the centre. On the contrary, a wide array of researchers and politicians launched a broad attack on anything from the cancer charity's fortune and structure to Ole Bang's character. As will be elaborated later on, the problematic establishment of the cancer centre was transformed into either a most welcome occasion for the Society's critics to criticise the Society or a means to promote one's own interests.

One of the fiercest political critics was Arne Melchior from the Folketing's Privatisation Council. When the sale of the Finsen grounds was final, he had lost his leverage against the Society as a member of the Privatisation Council – that is to delay the sale until the Society agreed to establish a centre with a scientific management – and he thus employed an alternative strategy to bring across his message. He publicly cancelled his membership of the Cancer Society because he believed the members of its management to be “liars and frauds” who used “indecent methods to hoodwink the government into selling the Finsen grounds without a resulting cancer centre”⁶⁶³. Melchior urged the other 400,000 members of the Society to cancel their memberships as well, as this would probably be the only effective way to call the cancer charity to order. Melchior not only objected to the Society's latest aversion against establishing a permanent board of directors that would assure (public) researchers influence on the as of yet non-existing cancer centre, he also criticised the Society's massive accumulated wealth of over DKK 600 million⁶⁶⁴. He effectively made the case a matter of moral and used the press to drag the Society into “the moral arena” and away from its home turf of acting and being judged according to business logic. In his own words:

I have lost my eldest child because of a cancer disease, so nobody feels stronger for the good cause than I. Several times I have gladly gone out with the collection box to collect money for the Danish Cancer Society, but I would be ashamed to do so now, when they are sitting on their coffers. Director Ole Bang seems to have one thought in his head only: to build a business empire. It is like a plant that grows by budding, while cancer-patients are forgotten. I have enjoyed fantastic support from colleagues, friends and the cancer-stricken. They agree with my critique and support my action.⁶⁶⁵

The colleagues and friends referred to were, amongst others, the State-employed cancer researchers Heine Høi Hansen from Rigshospitalet's Radium Station, Keld Danø from Rigshospitalet's Finsen Laboratory, Elisabeth Bock from Copenhagen University's Protein Lab, oncologist Nis I. Nissen from Rigshospitalet's Haematological-Oncology Department,

⁶⁶³ NN. Ibid.: "Arne Melchior: Uanstændige metoder" p. 23.

⁶⁶⁴ NN. (1991) "Melchior forlader Kræftens Bekæmpelse" *Berlingske Tidende* 02.10.1991, p. 6.

NN. (1991) "Arne Melchior: Uanstændige metoder" *B.T.* 04.10.1991, p. 23.

⁶⁶⁵ NN. (1991) "Arne Melchior: Uanstændige metoder" *B.T.* 04.10.1991, p. 23.

The Cancer Centre That Never Was

Rigshospitalet's cancer physician Jens Pedersen-Bjergaard, Rigshospitalet's oncologist Mikael Rørth, Jørgen Rygaard from Copenhagen Municipal Hospital, and his old friend and former Fibiger Institute Director Jørgen Kieler⁶⁶⁶, who had successfully launched a media campaign to discredit the Society (for an impression of the effect on the Society's income, see figure 4.1 in chapter 4). They each had different points of critique that can be summarised as follows and which are heavily loaded with their perception of moral standards for a private charity organisation and which all disregard the fact that the development could also be seen as the legally sound transaction of a private business and its right to act as it pleased:

- 1) The Society was not really interested in a cancer centre and had only used the dream of it to buy the entire Finsen grounds⁶⁶⁷.
- 2) The political and administrative management of the Society had deceived the government, the Privatisation Council, and its scientific negotiation parties. The management should be dismissed (especially Ole Bang)⁶⁶⁸.
- 3) The Society conducted property speculation which was not in agreement with the humble ideology of a charity organisation⁶⁶⁹.
- 4) The annual budgets of the Society were non-transparent, and the Society lied about how much of the donated money was spent on research and administration. In other words, the Society was accused of creative accounting⁶⁷⁰.
- 5) The Cancer Society was governed by a management that did not include a single active cancer researcher⁶⁷¹.
- 6) The Society's unscientific management meddled with the scientific decisions of the Scientific Council⁶⁷².

⁶⁶⁶ Melchior, A. (1991) "Ny ledelse af Kræftens Bekæmpelse" Berlingske Tidende 11.10.1991, p. 11.

Kieler, J. (1991) "Løgn fra sandhedens vogtere" Politiken 25.10.1991, p. 5.

⁶⁶⁷ Bock, E. (1991) "Sandheden om en sandhed" Politiken København 18.10.1991, p. 5.

Gardel, U. (1991) "Strid om salget af Finsen blusser op" Berlingske Tidende København 21.10.1991, p. 6.

Pedersen-Bjergaard, J. (1991) "Hvem fik de 46 millioner?" Politiken København 21.10.1991, p. 5.

⁶⁶⁸ Melchior, A. (1991) "Ny ledelse af Kræftens Bekæmpelse" Berlingske Tidende 11.10.1991.

Bock, E. (1991) "Sandheden tak!" Berlingske Tidende København 11.10.1991, p. 11.

⁶⁶⁹ Melchior, A. (1991) "Ny ledelse af Kræftens Bekæmpelse" Berlingske Tidende 11.10.1991.

⁶⁷⁰ Danø, K. Ibid.: "Regnskabsudlægningen i Kræftens Bekæmpelse er kreativ" København 13.10.1991, p. 16.

NN. (1991) "Kræftpenge spildt på administration" Berlingske Tidende 13.10.1991, p. 1.

Pedersen-Bjergaard, J. (1991) "Hvem fik de 46 millioner?" Politiken København 21.10.1991, p. 5.

⁶⁷¹ Melchior, A. (1991) "Ny ledelse af Kræftens Bekæmpelse" Berlingske Tidende 11.10.1991, p. 11.

Danø, K. (1991) "Sådan bør Kræftens Bekæmpelse reorganiseres" Berlingske Tidende København 24.10.1991, p. 11.

⁶⁷² Kieler, J. (1991) "Løgn fra sandhedens vogtere" Politiken 25.10.1991, p. 5.

Kieler, J. (1991) "Det er Herman Autrup der manipulerer" Berlingske Tidende 29.10.1991, p. 13.

The Cancer Centre That Never Was

7) The Society was impervious to critique and would punish any researcher who dared to question the organisation by withdrawing grants⁶⁷³.

8) The Society was “sitting on its coffers” and did not spend enough money on cancer research. The Society should not have its own research institutions. It should rather spend its money directly on cancer research like other foundations for scientific work.⁶⁷⁴

In addition to these press-mediated accusations, the group of critical cancer researchers found other ways to undermine the management of the Society. According to Odense University oncologist Carsten Rose of the Society’s Head Board, a prominent member of the Scientific Council had launched a petition in the oncology departments all over the country with the sole purpose of having Ole Bang dismissed as director of the Cancer Society⁶⁷⁵. Also, it was rumoured that the Danish Medical Society was preparing a vote of no confidence against the Cancer Society’s chairman, Bent Harvald, who was also President of this professional association⁶⁷⁶. Given that Harvald was to retire shortly after, the Head Board considered the initiative to be a malicious statement in the campaign against the Society with no other purpose than to checkmate the cancer charity in the Finsen conflict and to “gain total control of Danish cancer research”⁶⁷⁷. The Society and its supporters actively tried to refute the criticism made against it and explain its actions to the Danish public. Some of the accusations were made against the Society’s overall policy/business logic – such as the decision to run its own research institutes and the decision to invest money in bonds and bricks for the sake of asset management and survival – and they had been advanced and answered many times before.

However, some of the accusations were more serious and demanded immediate response from the Society: the accusation of fraud, creative accounting and alleged financial sanctions against critical researchers. According to the Society, these accusations were downright wrong, and it tried to refute them in the press again and again⁶⁷⁸. The financial of the Society explained the budget on several occasions, but to little avail as the press was supposedly more interested in

⁶⁷³ Autrup, H. (1991) "Marionetterne" *Berlingske Tidende* 23.10.1991, p. 10.

Kieler, J. (1991) "Løgn fra sandhedens vogtere" *Politiken* 25.10.1991, p. 5.

⁶⁷⁴ Danø, K. (1991) "Kun en femtedel til kræftcenter" *Berlingske Tidende* København 05.12.1991, p. 14.

⁶⁷⁵ Draft for the meeting minutes of the Head Board, October 11th 1991. *Archives of the Danish Cancer Society, (Copenhagen)*. p. 3.

⁶⁷⁶ Ibid.

⁶⁷⁷ Ibid.

⁶⁷⁸ Bang, O. (1991) "Arne Melchior tager fejl" *Berlingske Tidende* 17.10.1991, p. 11.

NN. (1991) "Kræft-kritik afvises" *Berlingske Tidende* 14.10.1991, p. 1.

Autrup, H. (1991) "Marionetterne" *Berlingske Tidende* 23.10.1991, p. 10.

The Cancer Centre That Never Was

repeating the accusations over and over than in the technical explanation of the budget's construction⁶⁷⁹.

The situation was worsened when a few members of the Society's Head Board resigned in protest against the actions and non-transparent budgets of the cancer charity⁶⁸⁰. Most members of the Head Board and the Executive Committee agreed that the critique was not just, however. It was argued that the criticism was only put forward by a small group of cancer researchers and not the entire Danish public, and that the individual counts of criticism could easily be countered with facts.⁶⁸¹ However according to Erik Amdrup of the Society, the Head Board and the Executive Committee were oddly ignored by the press:

During the continued attack on the Society, predominantly aimed at the director's character, it was odd that the Executive Committee was protected despite the fact that its members did not try to hide, and on numerous occasions publicly acknowledged, responsibility of the decisions made. This was true for the president, Lars Nordskov Nielsen, and the longstanding member, Tove Smidth – persons whom the media were otherwise not reluctant to ask for comments – and it was also true for the internationally respected board members lawyer Fisch-Thomsen and professor N. O. Kjeldgaard. If one read the newspapers or watched TV, one could get the erroneous impression that the board members either did not exist or snored to the beat of the director's baton. If they wanted to take part in the debate, they had to write readers' letters.⁶⁸²

The Board and the Executive Committee had a hard time getting through to the press and the public with their opinions. Only Ole Bang was in focus, and he could not convincingly comment on the critique of his own person.

In summation, the Society's management saw the strategies of the Society's critics as tools to gain power over the Cancer Society and to achieve this goal:

- By demanding a scientific management for the proposed Finsen research centre (with no lay representation from the Society).

⁶⁷⁹ Bjerre, M. (1991) "Keld Danøs tarvelige talmagi" *Berlingske Tidende* 17.10.1991, p. 11.

Kræftens-Bekæmpelse (1991). *Årsberetning*. København, Kræftens Bekæmpelse, p. 53.

The Society was later cleared of all charges of creative accounting and misuse of the donated money, when an impartial and state-authorised public accountant firm reviewed the Society's dealings and budgets in the years in question. See: KPMG C. Jespersen: "*Beretning om gennemgang af administration af udvalgte områder indenfor Kræftens Bekæmpelse*" (June, 1994). *Archives of the Danish Cancer Society*, (Copenhagen).

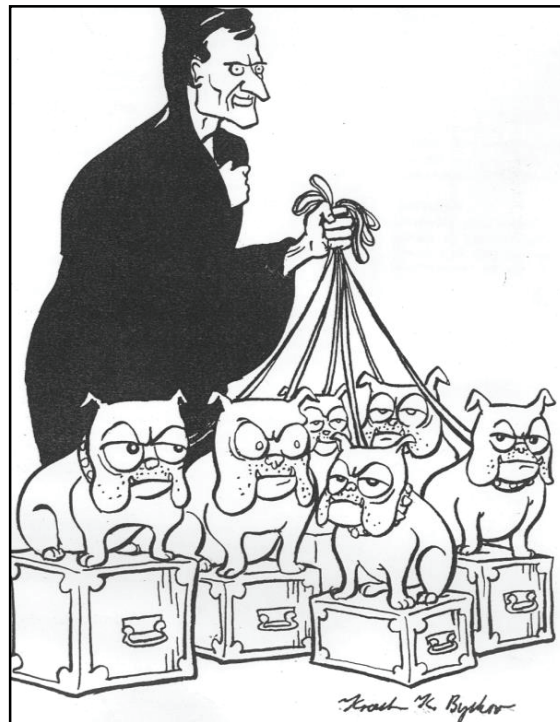
⁶⁸⁰ Kassebeer, S. (1991) "Borgmester forlader to hovedbestyrelsesposter" *Berlingske Tidende* København 18.10.1991, p. 6.

⁶⁸¹ Supplement to the chairman's "Thoughts on the Danish Cancer Society", August 14th 1991. *Archives of the Danish Cancer Society*, (Copenhagen). p. 2.

⁶⁸² Amdrup, E. (1998). *Som jeg så det - en kirurgs tilbageblik*. Danmark, Gyldendal, p. 199.

The Cancer Centre That Never Was

- By launching a negative press campaign against the Society, so that fewer people would support the organisation financially.
- By creating the illusion in newspaper articles that the conflict in the cancer community was between a united front of all the country's cancer researchers against the Society.
- By circulating a petition for a vote of misconfidence about Bent Harvald's presidency of the Danish Medical Society (even though his presidency ended soon after, anyway), which could only be seen as an attempt to undermine the authority and character of the Society's managers.
- By establishing a competing cancer charity.



Newspaper drawing (Universitetsavisen, 1991): Only very few (university) papers chose to cast the State as the villain in the centre affair, such as this drawing which portrays the Minister of Education as the witch guarding a treasure/the public funds in the H.C. Andersen fairy tale “The Tinder-Box”.

Only a few persons from outside the Society tried to defend the cancer charity by stating that the management had acted according to the practice of common fundraising, or that the real culprit

The Cancer Centre That Never Was

in the affair was the “State” which did not contribute enough to Danish cancer research⁶⁸³. In retrospect, Erik Amdrup described the press’ role in the matter in the following way:

The media coverage is expected to be critical, but in this case it was biased, and that cannot be the purpose of good journalism. It was almost entirely based on information from negative sources, and a picture of the Society’s opponents eventually took form. A few of them had knowledge of the Society, such as Jørgen Kieler, who had left the Society’s Fibiger Institute because of old age and never concealed his discontent with the Head Board’s and the Executive Committee’s politics. As one would expect, this old freedom fighter concealed neither countenance nor names, and even though I disagree with his allegations, I respect him more than the persons who attacked the Society on the basis of the little knowledge about the Society one gets when one applies to the Society for grants. The same is true with regard to Professor Jørgen Rygaard who before and at the beginning of my time in the Society turned in a good performance for the Society. I do not know the reason for Rygaard’s subsequent aversion, which was manifested in the establishment of the competing “Danish Cancer Research Foundation”.⁶⁸⁴

5.8 A disinterested approach: centering science

The Society had a publicity problem and something needed to be done. On October 11th 1991, the Head Board decided that the time was ripe for putting the record straight. The Society needed to be clearer in its statements to the press about its suspicions that the conflict had little to do with the proposed research centre. Also, the Head Board felt that there was a definite need for a thorough debate on whether or not there was still sufficient scientific basis for the centre, or if there were better ways to support and promote Danish cancer research e.g. by importing renowned research groups from abroad⁶⁸⁵. Fortunately, the Society’s Scientific Council offered its assistance on this matter. The new Chairman of this Council, Professor of Clinical Epidemiology at the Institute of Preventive Medicine, Thorkild I. A. Sørensen, had followed the conflicts from the sideline, and now stated in a newspaper article that he wanted to mediate between the Society and the group of critical researchers:

This has become trench warfare with an almost unbearable mistrust between the involved parties – instead of utilisation of this fantastic opportunity for Danish research. I will do what I can to re-establish a healthy trust again.⁶⁸⁶

⁶⁸³ Stærbo, L. (1991) "Staten er skurken i kræftforskningen" *Universitetsavisen* 31.10.1991, p. 8.

Døllner, T. (1991) "Store penge koster penge" *Politiken* 25.10.1991, p. 5.

Again, these articles make an undifferentiated use of the word “State”.

⁶⁸⁴ Amdrup, E. (1998). *Som jeg så det - en kirurgs tilbageblik*. Danmark, Gyldendal, p. 198.

⁶⁸⁵ Draft for the meeting minutes of the Head Board, October 11th 1991. *Archives of the Danish Cancer Society, (Copenhagen)*. p. 3.

⁶⁸⁶ Lundbeck, S. and T. Bagge (1991) "Vi er ikke bedragere" *B.T.* 04.10.1991, p. 22.

The Cancer Centre That Never Was

The Society's Scientific Council consisted of both intra and extramural cancer *researchers* and was the diplomatic agent to bring the parties back to the negotiation table. At the meeting of the Head Board, Sørensen presented his solution to the conflicts about the cancer research centre:

The Scientific Council suggests that interested researchers and research groups should have the opportunity to propose a solution to the conflict. The solution must improve the conditions of cancer research. The Scientific Council offers to mediate so that the researchers will get the opportunity to present research plans and corresponding structures that will allow the involved institutes and researchers to collaborate. The Scientific Council thus suggests that the next move is preceded by a gathering of all interested researchers.⁶⁸⁷

In other words, Sørensen and the rest of the Council wanted to invite every cancer researcher in the country to a meeting in which they would be given the chance to express their opinion on the need, structure, scientific basis, and feasibility of the cancer centre⁶⁸⁸. According to Sørensen, it was not at all certain that the majority of Danish cancer researchers supported the centre plans, as there was now a considerable divergence in this groups' perception of the need for a geographical centralisation and physical coordination of cancer research⁶⁸⁹. Not all were convinced that the centre would yield scientific results that would not otherwise be obtained by the research groups in their current locations.

The Head Board and the Executive Committee of the Society welcomed the initiative to analyse the need for a cancer centre, and so did the Danish Oncology Society, who had otherwise been very critical of the Danish Cancer Society's actions in the Finsen affair:

So far we have monitored the situation with anxiety, as the debate has focused, to an alarming degree, on persons and principles rather than content. It is now the intention that the Scientific Council mediates contact to a wide segment of Danish cancer researchers and even international cancer communities. We have much faith that the Council will succeed in closing in on the essence of the matter: an evaluation of how to most effectively support the entire Danish cancer research and treatment for the benefit of the patients and their loved ones.⁶⁹⁰

The large-scale debate meeting was scheduled for January 23rd 1992. The Scientific Council needed time to prepare and send out invitations and questionnaires about the need for the cancer research centre, so the meeting could not be held right away. Invitations were sent out to

⁶⁸⁷ Draft for the meeting minutes of the Head Board, October 11th 1991. *Archives of the Danish Cancer Society, (Copenhagen)*. p. 4.

⁶⁸⁸ Ibid. p. 5.

Sørensen, T. I. A. (1991) "Mistilliden må fjernes" *Politiken* København 10.12.1991.

⁶⁸⁹ Ibid.

⁶⁹⁰ Meeting minutes of the Executive Committee, October 21st 1991. *Archives of the Danish Cancer Society, (Copenhagen)*. p. 5.

The Cancer Centre That Never Was

researchers who had received grants for cancer relevant projects from the Society, the MRC or the NSRC within the last five years⁶⁹¹. It was hoped that this group of researchers would fill in and return the questionnaires before the meeting, so that the Scientific Council could get an idea of the general attitude towards the centre plans. The meeting was to be led by a panel and an impartial moderator, and the administrative and political managements of any of the involved institutes were denied access to the meeting which was for researchers *only*. The moderator was the chief of the State-owned Danish Research Foundation, Peder Olesen Larsen, who was considered an impartial party by all⁶⁹². Also, a series of speakers were invited to present their views on different aspects of the cancer centre problem:

Niels Ole Kjeldgaard (Aarhus University molecular biologist and author of the Kjeldgaard Report of 1981):

“The history of the research centre”

Elisabeth Bock (Copenhagen University basic cancer researcher, author of the report for the Rockefeller Centre 1984):

“The idea and strategy of the research centre”

Keld Danø (Head of the Finsen Laboratory, secretary of the Kjeldgaard Report survey):

“The management and finance of the research centre”

Jesper Zeuthen (Researcher at the Fibiger Institute, secretary of the Kjeldgaard Report survey):

“Advantages and disadvantages of the research centre”

Nis Nissen (Rigshospitalet oncologist, author of the Kjeldgaard Report, author of the report for the Rockefeller Centre 1984):

“The research centre’s relation to clinical cancer research”

Mikael Rørth (Rigshospitalet oncologist, author of the report for the Rockefeller Centre 1984):

“Alternatives to a research centre in the Finsen area”

Jens Overgaard (Experimental oncologist researcher at the Society’s research unit in Aarhus):

“Can Danish cancer research be strengthened in other ways?”

⁶⁹¹ Meeting minutes of the Executive Committee, November 7th 1991. *Archives of the Danish Cancer Society, (Copenhagen)*. p. 1.

⁶⁹² Letter to Peder Olsen Larsen from Thorkild I. A. Sørensen, November 21st 1991. *Archives of the Danish Cancer Society, (Copenhagen)*. p. 1.

Kassebeer, S. (1992) "Stormøde om kræftcenter" *Berlingske Tidende* København 08.01.1992, p. 4.

The Cancer Centre That Never Was

The selection of these speakers posed a problem in itself, as the line-up could be interpreted as the Scientific Council's view on the conflict of the cancer research centre⁶⁹³. There needed to be a balance between those who were in favour of and in opposition to the centre and the different management models, otherwise the meeting would be doomed from the start. For this reason, one of the invited speakers, the former member of the Society's Executive Committee, Niels Ole Kjeldgaard, was almost shocked to be invited at all. Although he had been one of the authors of the Kjeldgaard Report of 1981, he no longer supported the establishment of a physical cancer research centre. Since his retirement from the Executive Committee 18 months earlier, he had only followed the Finsen affair from the sideline, and he now worried that the Scientific Council's efforts were in vain. He feared that the idea of the centre had become a "white elephant" so to speak, and that its history supported this stand. Prior to the meeting, he thus warned Thorkild I. A. Sørensen about the discussions to come:

Of course it is difficult for me to distance myself from something I have spent 10 years on. Looking back on the evolution [of the idea], or lack thereof, one might ask if the dream of a Danish centre is even realistic today with our quality potential. This will hopefully contribute to your understanding of my shock when I read the papers [the invitation]. Has the Scientific Council really not contemplated what a centre can and should be? Your introductory presentation is a pipedream with no basis. The concept of research quality is not even mentioned. The centre will appear as a question with no backdrop, with no constructive past.⁶⁹⁴

Furthermore, Kjeldgaard did not believe that the financing plan for the centre was tenable. As a university professor, he had often planned new research initiatives, and he feared that the Society had miscalculated how many research groups it would be able to move into the centre and the cost of fitting the buildings for laboratory use⁶⁹⁵. In other words, he feared that the centre plans had not been created within the confinements of what he called the "art of the feasible". The meeting's topic of discussion was thus an empty shell, and this led Kjeldgaard and most of the other invited speakers to fear that the meeting was in danger of continuing the conflict-ridden question of the structure of the centre which would not be appropriate, as the purpose of the meeting was merely to find out whether or not there was a scientific basis for

⁶⁹³ Four of the seven speakers were active critics of the Society, while the remaining three were either researchers or research administrators from the Society (Kjeldgaard, Zeuthen, Overgaard).

⁶⁹⁴ The question of whether or not there was in fact enough scientific potential in Denmark was not touched upon by others than Kjeldgaard himself. See: Letter from N. O. Kjeldgaard to T.I.A. Sørensen, December 12th 1991. *Archives of the Danish Cancer Society, (Copenhagen)*. p. 2.

⁶⁹⁵ Ibid. p. 3.

it⁶⁹⁶. Instead of eliminating the mistrust between the parties, the meeting could very well end up as a battleground. For although most agreed that there was a definite need for analysing the need for the centre, the small group of critical cancer researchers continued to attack the Society in the press, and many feared that the different battling parties were still too far apart to be able to debate in a rational manner. The media debate did in fact continue at full speed⁶⁹⁷. The fiercest critic raised the rhetoric and gave the readers of the newspapers the impression that the conflict was between the Society and the *entire* group of cancer researchers in the country⁶⁹⁸. The battle-lines were therefore clearly drawn at the opening of the meeting.

5.9 The debate meeting

On January 23rd, 250 Danish cancer researchers participated in the debate meeting. Research managers from the institutes involved in the negotiation for the centre were excluded from the meeting, which was supposed to be a forum for cancer researchers only. For the first time ever,

⁶⁹⁶ Letter to Peder Olesen Larsen from Thorkild I. A. Sørensen, November 21st 1991. *Archives of the Danish Cancer Society, (Copenhagen)*. p. 1.

Letter from Jens Overgaard to Thorkild I. A. Sørensen, December 18th 1991. *Archives of the Danish Cancer Society, (Copenhagen)*, p. 3.

Letter from Niels Ole Kjeldgaard to Thorkild I. A. Sørensen, December 12th 1991. *Archives of the Danish Cancer Society, (Copenhagen)*, p. 3-4.

⁶⁹⁷ In particular in Harvald, B. and E. Amtrup (1991). "Kampagnen mod Kræftens Bekæmpelse." *Ugeskrift for læger* **153**(49): 3500-3505, Pedersen-Bjergaard, J. (1991). "Svar." *Ugeskrift for læger* **153**(49): 3504, p. 3504, Rygaard, J. (1991). "Svar." *Ugeskrift for læger* **153**(49): 3504-3505, p. 3504-05.

A media database search on the words "Cancer Society" and "centre" revealed that at least 30 articles were written on the subject around the time of the grand debate meeting (January 1992-April 1992): Sørensen, T. I. A. (1992) "Det gik pengene til" *Berlingske Tidende* København 07.01.1992, Ziebe, H. (1992) "Forskning vigtigere end fejde" *Berlingske Tidende* 22-02-1992, Thomsen, J. (1992) "Intet fælles center for kræftforskning" *Berlingske Tidende* København 27.02.1992, Thomsen, J. (1992) "To centre for dansk kræftforskning" *Berlingske Tidende* København 28.02.1992, Thomsen, J. (1992) "Forskere uenige om kræftcenter" *Berlingske Tidende* København 24.01.1992, Simonsen, T. I. A. (1992) "Et skridt fremad" *Politiken* København 19.02.1992, NN. (1992) "Forsker lige i en hveserede" *Politiken* 05.03.1992; NN. (1992) "Kræftforskere samles på Rigshospitalet" *Politiken* 07.03.1992, NN. (1992) "Kræftcenter skrinlægges" *Politiken* 14.02.1992, NN. (1992) "Uenighed om kræftcenter" *Politiken* 24.01.1992, Nielsen, S. (1992) "Kræft, trit og retning" *Politiken* 01-03-1992, Kassebeer, S. (1992) "Stormøde om kræftcenter" *Berlingske Tidende* København 08.01.1992, Dahlin, M. (1992) "Strid blandt kræftforskere" *Berlingske Tidende* 15.02.1992, Andreassen, M., F. Blasi, et al. (1992) "Støtter nyt center for kræftforskning" *Berlingske tidende* 11.03.1992, NN. (1992) "Nej til nyt kræft-center" *B.T.* 14.02.1992, Juul-Madsen, A. (1992) "Politisk røre over nej til kræft-center" *Berlingske Tidende* København 15.02.1992, NN. (1992) "Minister skuffet over Kræftens Bekæmpelse" *Berlingske Tidende* 17.02.1992, NN. (1992) "Kræftskandalen" *Ekstra Bladet* 19.02.1992, Jørgensen, P. S. (1992) "Arne Melchior må undskyldes" *Politiken* København 22.02.1992, NN. (1992) "Kræftens Bekæmpelse svindler" *Ekstra Bladet* 27.02.1992, NN. (1992) "Melodien der blev væk" *Berlingske Tidende* 01.03.1992, Clemmesen, I. (1992) "Vi vil ikke kaldes for andenrangs" *Berlingske Tidende* 04.03.1992, Melchior, A. (1992) "Sløser med betroede midler" *Politiken* København 06.03.1992, Melchior, A. (1992) "Et dansk kræftforskningscenter skal ikke forpurre" *Berlingske Tidende* København 06.03.1992, Celis, J. E. (1992) "Kaos om kræft" *Politiken*, Bentzen, S. M. (1992) "Kræftforskningsdebatten set fra sidelinjen" *Berlingske Tidende* København 11.03.1992, Bentzen, S. M. (1992) "Forskernes kræftstrid" *Politiken* København 13.03.1992, Christensen, S. (1992) "Planerne om Finsen Parken skrinlagt" *Politiken* 15.03.1992, Danø, K. (1992) "Sagen om kræftforskningscentret var ikke noget spil" *Berlingske Tidende* 22.03.1992, Sørensen, T. I. A. (1992) "Misvisende debat om dansk kræftforskningscenter" *Berlingske Tidende* København 10.04.1992.

⁶⁹⁸ Danø, K. (1991). "Svar." *Ugeskrift for læger* **153**(49): 3502-3504, p. 3502.

The Cancer Centre That Never Was

they were all given the chance to express their opinion on the proposed centre. The press was invited too and the entire meeting was recorded on tape so that the Scientific Council could analyse the statements later on. The following summary of the events of the meeting is based on a print of these recordings.

Niels Ole Kjeldgaard was the first speaker to present his topic; a brief overview of the history and possible future of the idea of a cancer research centre in Denmark. According to Kjeldgaard, the situation of the early 1990s was quite different from that of the early 1980s, when he had recommended the establishment of comprehensive cancer centres in the Kjeldgaard Report. He was no longer convinced that a cancer centre – be that a comprehensive one or the proposed cancer research centre – was the best tool to promote and strengthen the quality of Danish cancer research. To illustrate and elaborate his point he posed two central questions:

- 1) Are there enough internationally renowned cancer research groups in Copenhagen to establish a centre with an excellent international reputation?
- 2) Will it contribute to the strength and development of Danish cancer research to place these groups under the same roof?⁶⁹⁹

According to Kjeldgaard, 80% of all cancer research projects in the country were done in the relatively small part of Copenhagen called “Østerbro”. This was the area in which both the Society’s Finsen buildings, the Finsen Laboratory, the Medical Faculty, and Rigshospitalet were located, see appendix E. Kjeldgaard therefore asked “How much money should be spent on moving people who are already neighbours?”⁷⁰⁰ Whereas many cancer researchers and groups were pressed for space in the early 1980s when the negotiation parties were planning for the Rockefeller centre, this was not the case in the early 1990s. According to Kjeldgaard, the MRC no longer needed a centre to place its two research professors in, as Olsson had moved to the US and Lars-Inge Larsson had found tenure at the State’s Serum Institute. Also, Kjeldgaard claimed that there were not enough renowned and active cancer research groups in the lot to create a centre of the desired international standard. This was, of course, a bold statement in a room full of Danish cancer researchers, but Kjeldgaard based his claim on bibliographical citations studies and continued with a recommendation to the Society:

⁶⁹⁹ Print I of the recorded debate meeting, January 23rd 1992. *Archives of the Danish Cancer Society, (Copenhagen)*. p. 6.

⁷⁰⁰ Ibid. p. 7.

The Cancer Centre That Never Was

Forget the centre, unless some excellent international researchers can be found who can be the foundation of the future development of a cancer centre with an international reputation. But if this is not possible, I think we should establish research scholarships for 5 or 10 years instead in order to [strengthen] the quality of young Danish researchers, who after all already exist.⁷⁰¹

The next speaker was Elisabeth Bock from the medical Faculty of Copenhagen University. As one of the most active critics of the Society's dealings in the Finsen affair, her opinion on the need for a cancer centre was clear from the beginning. The meeting schedules state that the title of her talk was "The idea and strategy of the research centre", but all in all her talk was a continuation of the press-mediated attack on the Society's aversion against establishing a board of directors for the centre⁷⁰². In other words, she wanted to discuss the structure of the proposed centre before discussing its scientific content, as had been anticipated by many of the other participants. The next speaker in line, Keld Danø, had been invited to talk about the management and finance of the centre, and he therefore continued this line of arguments⁷⁰³. As representatives of some of the most aggressive critics in the conflict, Bock and Danø were definitely for the Finsen centre. They argued that placing researchers under the same roof would result in synergy effects and more quality research, and that the price of establishing the centre was very small compared with the potential outcome and the savings on shared apparatus etc.

To the next speaker, the Society's basic cancer researcher from the Fibiger Institute, Jesper Zeuthen, this synergy effect did not emerge ex nihilo. He presented a sociological study on communication between laboratories (which unfortunately was not presented with a title or author), in which it was argued that research groups placed within a radius of 10 metres of each other communicated often and thus had a sound basis for understanding each other's work and even working together on a shared project⁷⁰⁴. However, if the distance between the labs exceeded the 10 meters, the frequency of talk and collaboration declined drastically. Quite interestingly, Zeuthen argued that the study showed that the frequency remained about the same for any distance above 10 metres. In other words, it did not matter if the laboratories were 15 or 900 metres apart. If the purpose of the centre was more collaboration between the research groups than what was already taking place in their current position on Østerbro – in which the distances between the research institutes were already short – it would pose a great challenge to the architectural design of the research centre.

⁷⁰¹ Ibid.

⁷⁰² Ibid. p. 9-12.

⁷⁰³ Ibid. p. 13-17.

⁷⁰⁴ Ibid. p. 19-20.

The Cancer Centre That Never Was

The findings were of paramount importance to the topic of next speaker, clinical Oncologist at Rigshospitalet Nis I. Nissen. He spoke of the centre's relation to the clinical cancer research at Rigshospitalet, which was situated in another part of Østerbro. In Nissen's opinion, the Finsen centre lacked the clinical research module and patient treatment that had been part of the plans for the Rockefeller centre. And on this point, he was backed by the next speaker in line, Rigshospitalet's oncologist Mikael Rørth, who did not strongly support the Finsen model. Instead, he contemplated alternatives to the proposed centre by suggesting other locations nearer to Rigshospitalet. However, it seemed that none of these locations would be vacant for a long time. Although Rørth did not support the Finsen model and could not find any feasible alternatives to it, he did not dismiss the idea of a centre altogether as Kjeldgaard had done⁷⁰⁵. The last of the invited speakers, the Society's exp. oncologist Jens Overgaard, felt differently. Under the watchword "Danish cancer research lacks *brains* not *bricks*", Overgaard argued that the money for the cancer research centre would be better spent on promoting Danish research talent and so-called brick-less collaborations between existing research groups⁷⁰⁶:

I am convinced that if collaboration between the different research groups has not already been established in Copenhagen – where there is only a 15-minute bike-ride between the institutes – well, then it will not be promoted by moving into the same building. Completely different conditions apply here, and I think it is naïve to imagine that coordination on the Finsen grounds will generate significantly new and better research on that basis. On the contrary, this one-way ticket down Blegdamsvej will be the costliest in Danish history and it will demand so many resources that the centre can very well end up depriving other and more relevant activities of funds, and consequently damage Danish cancer research.⁷⁰⁷

Overgaard did not recommend the establishment of a cancer centre. Despite the fact that he came from Aarhus and not Copenhagen and that his objections could be interpreted as an attempt to stop all funds from being channelled into Copenhagen research, there was more to his objections than that. According to Overgaard, the discussions of the centre had been focussed on the formal structures of a non-existing centre without giving serious thought to the very substance and quality of the research about to be done there. Overgaard thus argued that one had to answer the following question before deciding on whether or not to establish the centre: "Will it improve Danish cancer research?". And on that note, the debate among the 250 cancer researchers began.

⁷⁰⁵ Ibid. p. 27.

⁷⁰⁶ Ibid. p. 29-33.

⁷⁰⁷ Ibid. p. 30-31.

The Cancer Centre That Never Was

On an overall level, the meeting reflected that the majority of the 250 cancer researchers were far from happy with the Finsen plan, as it lacked the close contact with clinical cancer research and patient treatment which had been part of Engelbreth-Holm's dream in 1945, the recommended centres of the Kjeldgaard Report in 1981, and the Rockefeller plans in 1984. The proposed centre at the Finsen grounds was not comprehensive! It was a cancer research centre without contact to the clinic, and this particularly worried the clinicians who had preferred a comprehensive cancer centre like the Rockefeller centre would have been. As mentioned in chapter 4, some of the researchers from the Fibiger Institute and the Finsen Institute had gathered to discuss what kind of research was to be done in the planned Rockefeller centre, and the basic and clinical researchers had agreed that basic cancer research and clinical cancer research were deeply dependent on each other. The oncogene paradigm had provided a new theoretical foundation for the understanding of cancer. Understanding some of the molecular mechanisms behind carcinogenesis was crucial to designing effective diagnostic tools and treatments for the cancer diseases and the reports from the clinic on how cancer tumours acted in vivo (response to treatment etc.) was invaluable to the basic researchers who used it to adjust and expand their theoretical models and/or were inspired to study new problems.

Since 1985, when the Danish researchers had first discussed the matter, the integration of the oncogene theory in cancer research had increased worldwide because it was not revolutionary in the sense that it did not exclude the existing theories on cancer causation – it provided a shared molecular explanation for them – and it could easily be employed by researchers without redefining their projects fundamentally⁷⁰⁸. In addition, the theory and the use of basic sciences in cancer research became popular because of the availability and simplicity of the necessary tools and reagents, the technology's and theory's applicability on clinical research problems, and the fact that oncogene problems provided the advantage of results in relatively short time frames which meant more frequent publications.⁷⁰⁹ The same trend seems to have occurred in Denmark; at least this was reflected in the statements of the cancer researchers at the grand debate meeting.

⁷⁰⁸ Helvoort, T. v. (1999). "A Century of Research into the Cause of Cancer: Is the New Oncogene Paradigm Revolutionary?" *History and Philosophy of the Life Sciences*: 293-330, p. 323.

Fujimura, J. H. (1988). "The Molecular Bandwagon in Cancer Research: Where Social Worlds Meet." *Social Problems*: 261-283, p. 269.

⁷⁰⁹ Fujimura, J. H. (1988). "The Molecular Bandwagon in Cancer Research: Where Social Worlds Meet." *Social Problems*: 261-283, p. 267-269, p. 271, p. 275.

The Cancer Centre That Never Was

As a clinical oncologist, Mikael Rørth argued that he needed to collaborate with the basic scientific disciplines, and clinician Nis I. Nissen concurred. The nature of cancer research had changed and the nature of the proposed centre had to accommodate this change, and this was not possible without contact to the clinic. Whereas early comprehensive cancer centres in other countries had placed basic and clinical cancer research under the same roof as cancer treatment in order to provide cancer patients with scientifically based and standardised treatment, see chapter 2, a portion of the researchers at the grand debate meeting seemed to think that basic cancer research was just as dependent on the results of the clinic, and that a cancer research centre without a clinic would be somehow anachronistic. Others felt that the expected scientific bonus of the centre was not proportionate to its costs, and that the money would be better spent on other cancer research initiatives⁷¹⁰.

Also, the majority of the invited researchers were concerned that the proponents of the centre seemed to focus on structure rather than content. The proponents on the other hand, argued that the focus had been necessary, because a board of directors without Ole Bang and his associates was the only thing that could protect the autonomy of science from the control of the management of the Society.

The meeting allowed every cancer researcher to comment on the centre plans in the presence of their peers and the press, the latter of which had up until now been dominated by a few active critics who on several occasions had claimed to represent the opinion of all Danish cancer researchers. Now the researchers had been given a chance to speak for themselves, and the result was that while most liked the idea of a cancer centre in general, they *doubted* the scientific outcome of the Finsen centre in particular⁷¹¹. In other words, the centre no longer had an entirely loyal clientele, which according to Timothy Lenoir is one of the conditions crucial to successful “institutionalisation”, see chapter 1, and the physical manifestation of unity in cancer research on a par with scientific disciplines and medical specialities at the universities and hospitals. The centre thus also lacked the scientific unity of researchers, their support, and the probable output

⁷¹⁰ Jesper Zeuthen of the Fibiger Institute particularly wanted to know what exactly the alleged “synergy effect”/the scientific bonus of the centre would be. In his opinion, the three strongest research fields within Danish cancer research were: clinical oncology, cancer epidemiology, and molecular oncology. He thus wondered why the plans for the centre, which was supposed to attract international researchers because of its high standards, were not already based on the talented researchers within these fields. See, print II of the debate meeting January 23rd 1992. *Archives of the Danish Cancer Society*, (Copenhagen), p. 21.

⁷¹¹ See: print II of the debate meeting January 23rd 1992. *Archives of the Danish Cancer Society*, (Copenhagen), p. 1-36.

NN. (1992) "Uenighed om kræftcenter" *Politiken* 24.01.1992, p. 9.

Thomsen, J. (1992) "Forskere uenige om kræftcenter" *Berlingske Tidende* København 24.01.1992, p. 8.

The Cancer Centre That Never Was

needed to persuade any private or public funding body of giving additional financial support, which as shown in the previous chapters had been a main strategy in the process of planning a centre in the 1980s.

It is noteworthy that because the proposed Finsen centre lacked contact to the clinic, some of the speakers who had previously fought tooth and nail for a scientific management of the centre – e.g. Nis I Nissen and Mikael Rørth – at this point seemed less enthusiastic to carry out the plans. This could indicate that at some point after the collapse of the Rockefeller plans, the Finsen plans and the sale of the Finsen grounds were used only as power-props to ensure publicly-employed researchers greater influence over the rather monolithic Cancer Society. In other words, perhaps the Finsen plans were the occasion but not the actual reason for a group of publicly employed researchers attempting to get access to and some means of influence over the “fortress” called the Cancer Society, who clearly was the financial force and the major power broker of their research field, and without whom only few large-scale initiatives could be carried through. But now suggestions were set forth at the meeting to spend the money for a centre on different (and as of yet not specified) cancer research support initiatives. To anyone using the cancer centre plans as a tool to yield support from the Society – and only to a minor degree to facilitate a synergy effect of coordinating the cancer research milieus – a dismissal of the centre plans may not have been unfavourable. Of course, it was not yet a choice between money through a centre or money through alternative initiatives, as the Society’s direction had not yet offered or agreed to such an alternative. But the previously instated legitimacy of battling in the moral arena may have offered the most Society-critical, and pro-centre orientated researchers hope of continuing a moral debate to seek influence on the Society’s internal process of research support. In general, however, the majority of the cancer researchers present at the meeting concluded that the comprehensive cancer centre dream was no longer possible from a scientific point of view because of location and financing problems, and that at pure research based Finsen centre was anachronistic and no longer in tune with the needs and nature of modern cancer research. When faced with the question of centre content and output vs. cost of establishment, the arguments for being pro the centre faded. The basis of a centre dissolved.

The majority of the researchers at the grand debate meeting doubted the merits of the proposed centre and the Society’s Scientific Council took this to heart, and on February 13th 1992, 11 out of 12 members recommended that the Society should NOT establish a cancer centre at Finsen:

The Cancer Centre That Never Was

Under the current condition, the Council finds that there is no basis for recommending the establishment of a cancer research centre at Finsen as outlined in the proposal of February 22nd 1990. The Council places great emphasis on the fact that the debate did not present sufficient arguments to motivate the planned investments. The debate pointed to a series of possible alternatives which were discussed at the Council's meeting on February 12th 1992. The Council recommends that the Cancer Society actively supports a number of cancer research lines without committing to actual "brick-centres". This aims at favouring a concentration in connection with certain cancer research areas in a mandatory collaboration with the hope of obtaining a synergy effect, which will strengthen cancer research with regards to quality and quantity. Such research collaboration will most often be characterised by a research centre without "walls" – co-operation across organisational boundaries – but with given mandatory collaboration and management structures.⁷¹²

The Scientific Council thus recommended that the DKK 45 million set aside by the Society for the renovation and fitting of the laboratory space in the Finsen centre for the potential extramural research groups should be used on new cancer research projects and "brick-less" collaborations instead⁷¹³. The Society's management decided to follow the recommendation of its Scientific Council. This marked the end of the Society's attempts to put the almost 50-year-old dream of a (comprehensive) cancer centre in Denmark into practise. In conclusion, the Society's management admitted to the organisation's members that a survey of the researchers' opinions on the centre was long overdue, but that they had not pushed for one in the light of the researchers' (blind) support of the idea of a centre in general⁷¹⁴. As mentioned in chapter 3, most of the cancer researchers liked the idea of a "cancer centre" in the 1980's Kjeldgaard survey. Because many of them had visited the American Sloan-Kettering cancer centre, the NCI or the British Imperial Cancer Research Fund they wanted something similar in Denmark. The dream of a cancer centre was generally appealing to Danish researchers even though it did not seem possible to carry it out in practice at home. The negotiations for and discussions of the Finsen plans had made this clear to most parties, and the Chairman explained the situation to the Head Board in the following way:

When the survey of the need to establish a shared cancer centre shows different results today than earlier, it is due to many different factors. The first negotiations took place at a time when several Copenhagen cancer research units suffered from unsatisfactory or time limited laboratory conditions. This provided a completely different negotiation basis compared with that of today when most research groups have satisfactory facilities. In

⁷¹² Recommendation from T.I.A. Sørensen and Hans Sjöström, February 13th 1992. *Archives of the Danish Cancer Society (Copenhagen)*. p. 1.

⁷¹³ Meanwhile, the Society still owned the entire Finsen grounds and was now free to rent the buildings to whomever it wanted, accept the ones already occupied by the Fibiger Institute, the Cancer Registry and Rigshospitalet's Finsen Laboratory, of course.

⁷¹⁴ Kræftens-Bekæmpelse (1991). *Årsberetning*. København, Kræftens Bekæmpelse, p. 3.

The Cancer Centre That Never Was

addition, the potentially interested research units are already placed in the neighbourhood and thus have easy access to each other.⁷¹⁵

In a continued effort to explain and legitimate the collapse of the centre plans to its members, the Society presented a press clipping in the annual report to describe the press' new perception of the Society's role in the Finsen conflict:

If one is to blame the Cancer Society for anything in connection with the purchase of the Finsen area, it is hardly that the Society failed to observe the actual purpose of the acquisition, but rather that they have kept the illusion of the central research centre alive for too long. Much indicates that the Society's Scientific Council was right to suggest that the DKK 45 million planned for the renovation and fitting of new research laboratories is better spent directly on research projects now that most cancer researchers are placed within a radius of 1 kilometre.⁷¹⁶

But neither the dream of a cancer centre nor the criticism against the Society died this easily.

5.10: Perspectivating summary

When the Society chose to defect from the Rockefeller plans of 1984 it did so as part of a new tactic to employ business-like strategies for investment, PR and fundraising to achieve its objective of supporting the anti-cancer cause. That is, the Society had experienced increasing pay-offs from this tactic as set and embodied by the Society's DJØF director Ole Bang, and this let the organisation to doubt that the Rockefeller plans (which restricted the realisation of the new approach) would lead to just as good results for the private charity as would a new strategy of expanding the framework of constraints that girded the choices and actions of the private cancer charity. The Society was transformed from a modest physician-dominated charity (whose limited power depended mostly on the scientific reputation and image of its medical/scientific researchers: social and cultural capital) to being a modern corporately led organisation with considerable wealth (economic capital) due to the financial skills of its new management and through the property it owned.

The Rockefeller plans had entailed several objectives for the multitude of public and private planners: coordinating cancer research (clinical and basic), getting the State to finance the equipment and modernisation of the Rockefeller building (a much needed improvement of facilities for public cancer research), a potential state takeover of the Cancer Society's research units⁷¹⁷, and making cancer research a priority to attract more private or public funding by

⁷¹⁵ The Chairman's report to the Head Board, February 26th 1992. *Personal papers of Ole Bang, (Copenhagen)*. p. 3.

⁷¹⁶ Kræftens-Bekæmpelse (1991). *Årsberetning*. København, Kræftens Bekæmpelse, p. 5. (original newspaper article was brought in Politiken).

⁷¹⁷ The Society's "Modest Charity Spear Head Ambition"-strategy of the time.

The Cancer Centre That Never Was

physically “institutionalising” the heterogeneous cancer research field which had not yet found independent status at the universities and hospitals.

However, at some point in the planning process, the Society chose to defect from these plans and objectives, it no longer fully shared, as its new organisational strategy gravitated more towards other means of maximizing its wealth, survival, and serving of the anti-cancer cause: e.g. investing in real estate to protect its capital against the inflationary pressure of the 1980s Danish economy, harvesting the PR value of having its own research units instead of handing them over to the State, and of buying real estate to ensure continuous room for its physically and scientifically expanding research units that would otherwise (in the Rockefeller plans) not have been allowed the necessary laboratory space or conditions – or worse – be split up!

The Society therefore presented the cancer community with plans to establish a cancer centre at another location than the Rockefeller Institute. Namely the Finsen campus at which the Society already owned one building for its Fibiger Institute. Although the new proposal would mean a deterioration of the comprehensive cancer centre dream inasmuch as it entailed no physical contact with clinical research, the Society favoured this model as it allowed the organisation to pursue its new fruitful strategy (investment, PR, keeping its research units together) and give the organisation full control of the financing – and consequently also the management – of the privately funded cancer centre that would also invite public research groups in as tenants.

As mentioned in chapter 4, the decision to defect from the Rockefeller plans did not have immediate negative effects for the Society in terms of decreased positive feedback or declining member counts or voluntary contributions. In contrast to a contractually based economic transaction, there was no legal or direct economical punishment for defecting from the Rockefeller plans. It was not a legal deal and there was no third party enforcement. But the informal institutions surrounding the transaction – such as code of conducts and the taste and preferences of the public giving donations to the Society – could still result in negative consequences for the cancer charity if its choices did not make sense to the broader public or somehow raised doubts about the charity’s moral incentives to support the anti-cancer cause in a proper manner. In other words, the mindset (or professional logic) guiding the Society’s choice of defection had to make sense to more than just the Society itself.

Because the Society’s director Ole Bang and the strategy he introduced were strongly guided by a professional “business logic” (associated with economically trained professional groups) that

The Cancer Centre That Never Was

traditionally clashed with the “scientific“ and “medical” logics of the cancer community’s researchers, who were already fearing the introduction of such business mentality at the hospitals, it was surprising that these professional groups did not at first oppose or voice their dissatisfaction with the defection to an extent that would affect the public opinion (and the informal institutions) and punish the Society. Instead, they did not dismiss the Finsen plan at first, although the lack of clinical contact would make the plans scientifically inferior to the original comprehensive cancer centre dream, and although the Society would be expected to finance and therefore control the entire thing.

The lack of immediate negative response thus indicated that,

- a) the cancer community accepted the Society’s economical wealth (economic capital) as the predominant form of power currency (symbolic capital) of the social field of cancer research;
- b) the lack of debate of a potential Finsen centre’s scientific program/content (lack of clinical contact) was not as important as possibly improving the researchers’ situation through modernised labs and the hope of extra (private) discretionary funds associated with the establishment of the centre;
- c) the centre became a means to “follow the money” rather than an end in times of state cutbacks for research in general;
- d) the centre could – possibly – provide the physical settings for a symbolic “institutionalisation” of the cancer research field on a par with the academic disciplines it sprang from. It would satisfy the need for a united identity. This incidentally seems to be a need closely linked to negative conjunctual change, formal institutions favouring applied research, unsatisfactory laboratory facilities, and a strategy to appeal for additional funding in the form of a cancer centre. A need that in the history of the cancer centre has not been as visible in times of science push funding practices and high conjuncture.

In summation, the lack of more outspoken and damaging critique of the Society’s defection may have owed less to the research community’s potential acceptance of the Society’s business logic reasons for defections and more to the hope that the proposal of a centre – any centre – could be the means to improve the standing and the conditions of the public research groups, which may be the reason why the discussions of both the Rockefeller and the Finsen plans focused on form

The Cancer Centre That Never Was

rather than content. The Finsen plan was a tool to utilise the existing institutional matrix that had meant reduced state support and increased wealth and research support from the private Society. And this may be why an intense appeal to the public (the public opinion) as a type of third party enforcement in moral matters was not yet called upon by these public researchers. But the lack of negative feedback may have led the Society to believe that its business logic and economic capital were in fact the most powerful in the social field, and that it could therefore act accordingly.

If the Society were to achieve its objectives, it needed to acquire the Finsen campus which as part of a government privatisation trend was put up for sale in open tender. The Society would have to place a bid for the property in direct competition with other interested private companies. A legal exemption clause could theoretically allow the government's Privatisation Council to sell the lot directly to one interested party without putting the area up for sale in open tender, provided that this party had a special worthy cause for buying and using the property. In this way, the Privatisation Council could support a worthy cause by removing the competitive element and a potential bidding war from the sale. A sale could thus go through at a potentially lower price than if it were made through open tender. On the other hand, government policy of the time was to make the public sector act according to market conditions, and a sale of the Finsen lot at the highest possible price through open tender was politically favourable.

As a cancer charity, the Society used the press to push for a use of the exemption clause, as the charity argued that there was hardly (morally) worthier causes than the anti-cancer cause and a cancer centre. To the Society, the use of the press was necessary because of the Privatisation Council's initial reluctance to use the clause and sell at a potentially lower price. However, the choice to opt for the use of the clause opened up an unexpected can of worms for the cancer charity, as the concept of a morally "worthy" cause changed the rules, currency and arena that made up the dynamic social field of the cancer community. A sale was suddenly morally linked by the press and the Privatisation Council to the establishment of not only a cancer centre, but a cancer centre that all public and private negotiation parties could agree on in unison. A linkage that the Society could have avoided completely, had it bought the Finsen campus in open tender as a standard contractually negotiated transaction with only *legal* third party enforcement.

The Society "got it wrong" with the choice of opting for the exemption clause. In a Northian perspective, this choice can easily be explained though. As mentioned in chapter 1, North does not believe in the universal existence of perfect markets where all transacting organisations

The Cancer Centre That Never Was

either make sufficiently informed and therefore correct and efficient choices or suffer negative feedbacks that will correct any poor choice. Instead, he advocates the existence of imperfect markets in which transacting organisations do not always know enough about each other, the transaction, and the potentially unstable conditions and circumstances of the trade to be made. In this way, it is quite possible to make erroneous choices and suffer very high transaction costs that cannot easily be corrected given that these conditions can be contingent on sociological processes and mindsets that can be hard to dissect and understand for the individual transacting organisation. In other words, it can be hard to know what went wrong and how to correct it. The unstable conditions could typically be the informal institutions girding the transaction's (moral) code of conducts, taste and preferences of the public etc.

In case of the Society opting to use the exemption clause, the organisation cannot have taken the unstable conditions of the transaction into account: The fact that its status and bargaining power could change if its economic capital was not the preferred currency in the murky waste-land that was the Privatisation Council members' subjective perception of what exactly a "worthy cause" was. The organisation unwittingly dropped the ball by admitting the opposing transaction party this power. A moral linkage was created between the Finsen sale and a privately financed cancer centre in which the public institutes were much more than just tenants worked against the Society's logic and desire to control a completely Society-financed cancer centre.

The Society had initially opted for the clause in order to make the best possible (and cheapest) purchase as a direct consequence of its management's business logic that may have been effective in the field of the cancer community but not in the field of politics, in which the decisions of the Privatization Council took place. The moral linkage between sale and centre became a Trojan horse for the critical public cancer researchers and the Privatisation Council to gain influence on the management and structuring of an otherwise privately financed initiative. The Society may not have been aware of the power of this (informal) linkage, as such a thing did not translate well into the sets of mental models/business logic of its direction, and through which the organisation filtered the information regarding the impending transaction of the Finsen campus.

Moreover, the Society may have been overly confident in its own strength to – in a Bourdieuan perspective – rely on its business logic and economic capital as the predominant (symbolic) capital of the social field. When consensus on a balance between public and private influence on the management and name of the proposed Finsen centre could not be reached, it became

The Cancer Centre That Never Was

evident that the Society's primary form of capital was not the only powerful currency. As the wealthiest funding body in the cancer community, the Society had had the upper hand and power in the field, but the exemption clause had subjected this social arena to a change of rules, values and capital. The field of the cancer community was suddenly no longer a closed scientific society, it was made accessible to the public and politicians through media covered political debates and decisions, opening the field to interaction with other social fields and their respective symbolic capitals, actors and alliances. It was now a moral arena with the public opinion as third party enforcer and in which economic capital could easily be triumphed by the social and cultural capital of researchers and politicians in the form of their ability to network, form strategic alliances, their social and scientific authority etc.

A small group of public researchers allied themselves with the politicians of the government's Privatisation Council in order to hold the Society to its moral alleged moral (not legal!) obligation to create a suitable cancer centre that all other public and private parties could agree on. The Society's choice to opt for the exemption clause and play the morality card against the Privatisation Council had thus backfired, as it was now considered fair game to attack the private organisation on the issue of the centre and its internal administration of the voluntary contributions for the anti-cancer cause. For was the Society in fact worthy? A line of critical questioning that would have previously been hindered by doxa made if the Society had opted to buy the Finsen campus in open tendering at a potentially higher price on a par with other interested bidders and subject to the terms of any other contractual business transaction.

In essence, the Society had used the press and moral arguments to expand the institutional matrix in favour of a cheaper sale of the Finsen grounds, and this had levelled the playing field of the cancer community inasmuch as many disgruntled negotiation parties now saw an opportunity to use these weapons against the Society to gain more influence and reach their objectives and improve their standing in the field. A media campaign against the Society was the direct result. The Society was vulnerable to negative feedback from the public: its members and source of potential contributors. And as the public opinion could affect the government's Privatisation Council's will to sell the Finsen grounds using the clause, the negative feedback became powerful leverage against the cancer charity: it could not live out its new strategy without purchasing the Finsen campus, and it also could not afford to suffer long-term negative returns in a broader societal sense. Nor could it, however, allow external parties (critical

The Cancer Centre That Never Was

researchers and politicians) to dictate its use of funds and the management and operation of an entirely privately financed cancer centre.

As a result the Society withdrew its bid on the Finsen campus. In Northian terms, this was a gridlock situation in which none of the involved planning parties or politicians were likely to realise the potential gains of the sale. Even though the Society was suffering the full brunt of the media campaign, the group of critical public researchers extended an olive branch in order to start bilateral negotiations with parts of the Society in order to find a suitable model, as they themselves had strong interests in the centre and could not do without the participation of the Society. Power fluctuated back to the cancer charity.

Due to new polity, the Society could now only buy the property in open tendering without any clauses or legal obligations to establish cancer centres. Still, the government's Privatisation Council went against all legal practice and imposed such an informal moral obligation on the charity through the press. In this sense, the private charity was not being held to the same sets of standards as would ordinary businesses bidding on the campus. It seems that the Society's transition from a physician-dominated, modest charity to a DJØF-led modern corporate charity had been costly, as not all agreed with the Society's management that a non-profit organisation should speculate financially or act according to business logic in order to support the anti-cancer cause. The criticism made against the organisation was multifaceted, ranging from its moral obligation to establish a cancer centre at Finsen, its internal decisions regarding scientific planning and support, to the moral fibre of its director.

Eventually, the Society planned a grand debate meeting at which the Danish cancer researchers were all invited to discuss the Finsen plans, and in this way make the debate about disinterested science rather than about the moral disposition of the Society. The outcome of the meeting was that a majority of the many researchers felt that:

- a) the Finsen plans were inferior to the Rockefeller plans, as they lacked clinical activities;
- b) they dealt with form rather than content;
- c) there was no evidence that mutual housing would improve Danish cancer research through increased collaboration;
- d) the money was better spent on "brains than on bricks";
- e) the plans were anachronistic as the nature of cancer research had changed.

The Cancer Centre That Never Was

The lack of content for the cancer centre was now displaying its consequences. As predicted at the 1970s Washington conference on planning for cancer centres (chapter 3), a clearly defined research program was the first and most important step in planning a cancer centre if it were to have any chance of succeeding. The plans had now been proven to be an empty shell; a tool for other agendas than that of coordinating Danish cancer research.

So why did the majority of researchers dismiss the plans now and not much earlier on? Contrary to the picture from the press, the majority of cancer researchers had been silent during the media campaign and not chosen sides. The few but loud critics may have had personal agendas and political motives for wanting a centre, which went beyond the majority's wish to coordinate cancer research and improve the (often) poor state of cancer labs. But as the years went by, and the labs were modernised through slowly increasing public expenditures for the universities and hospitals (and not through funds for cancer research in specific), the majority's need for better housing was diminished.

Also, the idea of increased social and scientific interaction as the result of shared housing was deflated by new sociological findings, and the notion that the research milieus were already closely situated geographically. Other means of collaborating and networking than a shared coffee machine was used in everyday laboratory life. In conclusion, the collapse of the Finsen plans happened that day at the grand debate meeting at the mercy of those who should have had the most central position in the negotiation in the first place, but the deterioration of the centre path had been on its way for many years.

But if it is true that the centre was essentially a means rather than the end in the opinion of the battling parties, what did the collapse mean to those who tried to keep the idea alive for reasons other than coordinating cancer research?

The Society: The organisation essentially got what it wanted: real estate to invest in, the publicity of its research units, buildings that allowed for scientific growth of these units. This was all part of its new strategy. Of course, it came at a high price, as the media debate would continue and take its toll on the Society's image and the level of private contributions for its anti-cancer cause.

The critical public and private researchers: This group may not have gotten a cancer centre, but they did manage to affect the monolithic Cancer Society whose power position in the cancer field was no longer cemented. The Society made many organisational changes and admissions

The Cancer Centre That Never Was

to this group of researchers regarding the practices of supporting research and budget transparency. Also, one of the grand debate meeting recommendations of spending the money for the cancer centre on different research initiatives was noted by the Society, and although this did not mean a guaranteed influx of money for their lines of work, the group of critical researchers had managed to push the funding practice in the direction they favoured (less strategic programs decided on by management, more through the Scientific Council). This recommendation even opened new possibilities to continue the media campaign against the Society post-Finsen collapse, as the moral attacks could surely apply to the question of which worthy initiatives the Society would spend the “centre-money”. In other words, they still had leverage.

The group did not get to coordinate Copenhagen cancer research or physically “institutionalise” it for a shared identity and a united front to make cancer research a priority of the state. As mentioned in the previous chapters, the use of the centre plans as means to get state or private funding rather than as a scientific objective in itself and the rhetoric used in the cancer research surveys and centre plans seem to indicate a need for a shared professional identity for the practitioners of the heterogeneous cancer research activities that ranged from bed to bedside and included many different and logically inconvergent professional groups (basic science vs. physicians) – that could not easily be fitted into one category guided by one logic as the overall norms and goals that unify and identify the group from others. And although the different areas of the umbrella-like field of cancer research were increasingly interdependent in their practices, a shared identity could not easily be brought about in the traditional academic sense of scientific disciplines and medical specialities. A physical building for cancer research could have mirrored a process of institutionalisation and professional identity outside academia. Even though it was, for a short while, possible to portray such unity to the press and to lay politicians in order to try to secure support for the centre (in addition to what was already channelled to the disciplines at the hospital and university), the lack of centre content eventually revealed the heterogeneity of the field, and the plans were dropped.

In a path dependence perspective, the dream of a cancer centre took on different forms from the early 1980s to 1992. The Rockefeller plan resembled the original Engelbreth-Holm vision of 1945 and the recommendations of the Kjeldgaard Report of 1981, however it was construed with no respect for the unfavourable formal institutions set by government in the form of a strict financial policy to control the growth of public expenditures, which was in direct conflict with

The Cancer Centre That Never Was

the Rockefeller plan's implicit demand for additional state funding for modernising and equipping the Rockefeller building.

The Society's defection from these plans happened due to incremental institutional change (a change in the taste and preferences regarding the government's policy) which allowed the Society and its new management to capitalise on the public's will to support the anti-cancer cause, which the State did not give priority in times of restraints on the growth of the hospital sector. This development led to the Society's strategy to fundraise aggressively, utilise its PR potential, and to invest in real estate as a way of protecting its capital against the inflationary pressure of 1980's Danish economy. This was made possible by the minor incremental changes of informal institutions – that is within the existing overall sets of constraints guiding the Society's actions. The Finsen plans were a way to continue utilising this institutional framework to the Society's advantage, and the path of the cancer centre was therefore continued albeit with a deteriorating content that no longer resembled the original comprehensive dream. This did not seem to matter to the negotiation parties for quite a while, as the plans had become a tool rather than the objective in the constant battling for symbolic capital and wealth maximisation in the dynamic social field of the cancer community.

Nevertheless, the deteriorating content eventually revealed itself to be devastating to the plans, as the Finsen proposal was dismissed at the grand debate meeting in 1992. It was concluded that the centre was not scientifically viable; in fact it was quite anachronistic, because the nature of cancer research had changed. And on a more metaphorical level, the centre was no longer essential as a tool and as leverage for the negotiation parties to achieve their objectives that had very little to do with the original plans to coordinate cancer research. Some of these objectives were achieved: the Society carried out its strategy, the public critics had managed to set an arena for battling the Society in which its economic form of capital was only equal or even inferior to theirs, and public critics thereby gained leverage to ensure continued influence on the Society regardless of the establishment of a centre.

However, some objectives were not achieved with the collapse of the plans: the unarticulated strive for shared identity and symbolic institutionalisation as the means to increase state support for cancer research in times of minimal state support and increased focus on the applicability of science. But as long as the Society reserved the centre money for other cancer research initiatives, the state support may not have been as important.

The Cancer Centre That Never Was

In conclusion, the path of the cancer centre dissolved beneath the feet of the negotiation parties. Not because of choices of a political or economic nature that provided real tangible alternatives – new paths. The path simply dissolved. Had the idea of the cancer centre outlived itself? Was it finally buried or could a change of circumstances revive it as a comfortable tool – a content-less ghostly and illusive idea – whenever leverage and financial conditions in the cancer field changed? The next chapter will describe the aftermaths of the dissolved path.

The Cancer Centre That Never Was

Table 5.1: Gallery of key persons in chapter 5

Name:	Institutional affiliation:	Representing State/Cancer Society:	Pro Finsen centre:	Con Finsen centre:	Summarised actions in this chapter:
Professor MD Erik Amdrup	-Professor in surgery, Aarhus University. - Chairman of the Scientific Council (1981-1988) -Head of the Society's Scientific Department (1988)	Cancer Society	-	X	The Aarhus professor adopted the aims and value of the private business the Cancer Society, as he entered its Scientific Department. He never liked the idea of a cancer centre to begin with – because he did not believe it to be the right organisational tool to coordinate and strengthen Danish cancer research – but he appreciated the Society's financial and publicity benefits of acquiring the Finsen grounds and investing in real estate and the cancer research centre. In this way, Amdrup adopted the aims of the Society and remained loyal to the Society's management. He was against the proposal for a management of the Finsen centre as set forward by the researchers involved in the “all-researcher-negotiations” in 1990. He thought it would deprive the Society of influence and veto-right on important issues. Did not want to establish a management for a centre, before the scientific content of it had been discussed.
Dr. MD Jørgen Kieler	Director of the Fibiger Institute until 1989 (retired)	-	(X) unclear	unclear	When he retired in 1989, he wanted to preserve the traditional hierarchical administrative structure at his institute because he argued that the Institute's fruitful research milieu was a direct result thereof. He was thus against the Society management's plans to implement more democratic structures at the Fibiger. In 1990-91, Kieler joined his friend and politician Arne Melchior (of the government's Privatisation Council) and the Society-critical and publicly-employed researchers Heine Høi Hansen, Keld Danø, Elisabeth Bock, Nis I. Nissen, Jens Pedersen-Bjergaard, Mikael Rørth, and Jørgen Rygaard in their contributions to the negative press coverage of the Society's management, dealings, structure, budget etc. He thus took part in the strategy to delay the sale of the Finsen grounds until a scientific management was established (e.g. by making Arne Melchior aware of the situation regarding the management discussions). It is not clear what Kieler's position on the actual Finsen centre was. The retired cancer researcher had nothing to gain by the establishment for the centre, but he may have regarded the debate about the centre's management as a chance to comment on the Society's politics in general. He was still discontent with Ole Bang and his colleagues for the way they had treated him and his Institute (budget reforms etc., see chapter 4). He had never concealed his discontent with the politics of the Executive Committee and the Head Board, and he thus used the negative press coverage of the Society as the means to continue making his discontent heard. At the grand debate meeting in January 1992, he supported the establishment of the Finsen centre, although he did not prefer this cancer research centre to the failed <i>comprehensive</i> Rockefeller cancer centre. It seems that he supported the plans – not from a scientific point of view – but for the sake of pushing through a scientific management with minimal lay representation from the Society – a management that would deprive the Society's management of power and influence over the cancer research field.

The Cancer Centre That Never Was

Professor MD Bent Harvald	- Chairman of the Society 31st December 1988-1993. -Professor at Odense University - President of the Danish Medical Association.	Cancer Society	X	X (from Feb.13 th 1992)	Clinical researcher from Odense who adopted the aims and values of the Society when he became chairman in 1988. As Bang, he used the press against the Minister of Health (Elsebeth Kock Petersen) so that she would sell the Finsen grounds directly to the Society via the exemption clause (and not in open tendering). In this way, Harvald and his management protected the Society against too high a price on the real estate they wanted to invest in, but made it vulnerable to moral based scrutiny in the public eye. On one occasion in 1990 he and the rest of management issued a press release stating that all public and private negotiation parties agreed on a management for the Finsen centre – even though this was not the case – and sent it to the Minister of Health (now Ester Larsen) and the Minister of Education (Bertel Haarder). This action almost pushed through a sale of the Finsen grounds. It would seem that the management of the Society used the promise to establish a cancer centre as leverage to acquire the Finsen grounds (although they did want to establish a cancer research centre, just not on any terms). He did not want to give in to the demands of establishing a (scientific) management for the Finsen centre before its scientific content had even been discussed. The priority of the Society in the purchase of the Finsen grounds was as follows: 1) Making a sound financial investment. 2) Getting a place to coordinate the Society's own research groups. 3) Establishing a cancer research centre for both private and state-held research groups and institutes, (although the intent to establish the centre was sincere enough, the centre was an additional bonus to items 1 and 2).
Dr. MD Erik Vraa	Rigshospitalet	State/Rigshospitalet	X	-	Participated in talks about the Society's plans for a cancer research centre at the Finsen area on January 11 th 1989. Interests and strategies not explicit.
Professor Elisabeth Bock	-Professor in Cell biology, The Protein laboratory, The Medical Faculty, Copenhagen University. - MRC member (1984-1991)	State/Copenhagen University	X	-	Participated in the initial negotiation meeting about the Finsen centre plans on January 11 th 1989. She worried about the terms and the measure of influence the publicly-employed researchers would be given in an entirely Society-owned research centre. From 1990, she participated in the media campaign against the Society in order to pressure the organisation into establishing a scientific management for the Finsen centre that would allow for more external influence over the monolithic Cancer Society. To Bock, the establishment of a scientific management with minimal lay representation from the Society was crucial for her decision to move into the proposed and otherwise Society-dominated centre. To Bock, the Finsen plans were not as ideal as the failed Rockefeller plans had been, as the new centre would move her further away from the clinic/Rigshospitalet, but she would probably get better laboratory facilities in the new centre. By using the press to affect the government's Privatisation Council to delay the sale of the Finsen and by contributing to a negative press coverage of the Society's politics and organisation, Bock and her Society-critical colleagues applied pressure on the Society to establish a scientific management that would deprive the cancer charity of a great deal of power. Bock and her colleagues put the Society in a difficult position. It could either: a) give in to the demands and lose power

The Cancer Centre That Never Was

					b) or abort the plans of buying the Finsen altogether, at the risk of being portrayed in the press as the party responsible for the cancer centre not being established which would damage the Society's reputation and perhaps even result in the management having to leave.
Prof, MD Arvid Maunsbach	- Dep. For Anatomy, Aarhus University. - MRC member (1984-1992) -(chairman of the MRC 1987-1989)	State/MRC	X	-	Represented the MRC at the negotiations for the Finsen centre on January 11 th 1989. He worried about a centre owned entirely by the Society, because it would leave the "State" without real influence. Wanted an equal State-Society collaboration.
Mads Bjerre	Chief of economy, the Cancer Society.	Cancer Society	x	X (from Feb.13 th 1992)	Participated in the initial negotiations with the public research institutes. He wanted the centre to be called "The Danish Cancer Society's Research Centre" for publicity purposes. He also insisted that the centre should be owned entirely by the Society. He thus acted according the financial and PR interests of the Society. Did not want to give in to the demands of establishing a (scientific) management for the Finsen centre before its scientific content had even been discussed.
Major consultant MD Jørgen Rygaard	- The Pathology Dep./ The Bartholin Institute, Copenhagen Municipal Hospital -MRC member (1986-1990)	State/MRC	neutral	neutral	Represented the MRC at the initial negotiations about the Finsen centre plans on January 11 th 1989. Stated that he found it unrealistic to believe that the "State" would finance a new cancer centre, and that it was therefore understandable that the Society (who would pay for the proposed Finsen centre) wanted to name and control the centre. As a former member of the Society's Information Department in the 1970s, he clearly appreciated the Society's need of publicity through the centre. Rygaard was neutral towards the Finsen plans and the establishment of a centre, but he did use the commotion and Society-critical press coverage that emerged from the centre-negotiations as a chance to establish a competing cancer charity – because he was discontent with the way the Society was operated and the way it dominated the cancer community.
Prof. MD Mikael Rørth	-Oncology Dep. OND/5074, Rigshospitalet. -MRC member (1987-1994, chairman 1992- 1994)	State/Rigs- hospitalet /MRC	(X)	-	Represented Rigshospitalet in the initial negotiations about the Finsen centre on January 11 th 1989. At this early point, he argued that the essential element in the negotiations ought to be the <i>scientific content</i> of the centre rather than the management mode and ownership of it. However, he later stated (as vice-chairman of the MRC) that the conflict over management was due to the fact that the State/Ministries of Health and Education did not contribute to the centre on an equal footing with the Cancer Society. At the grand debate meeting, he revealed that he did not like the proposed Finsen centre, as it lacked contact to the clinic. He argued that he, as a clinical oncologist, depended on the results of basic cancer research and vice versa. He had preferred the comprehensive cancer centre proposed at the Rockefeller in 1984 but did not find the new Finsen plans ideal albeit they were better than nothing. For a while he criticised the Society, but it seems that his criticism did not really concern the negotiations for the Finsen centre as it was rather targeted at the Society's clumsy withdrawal from the Rockefeller project and its dominance in the cancer community. As a member of the MRC, he may have preferred the cancer research field to be influenced by this public research

The Cancer Centre That Never Was

					council rather than by the wealthy private Cancer Society. He did not think it was ideal for a private charity like the Cancer Society to run its own research units either. This research political concern is reflected in Rørth's criticism of the Society.
Major consultant MD Jørn Giese	-MRC member (1985-1989) -Professor in human pathophysiology, Copenhagen University/ The Clinical-Physiological Department at KASGentofte.	State/MRC	X	-	Represented the MRC in the disastrous negotiation about the Finsen centre on January 11 th 1989. Argued that the "State" (meaning the Ministry of Health and/or the Ministry of Education) should be co-owner of the centre, as it needed to make its contributions to the anti-cancer cause visible.
Professor MD Heine Høi Hansen	-The Radium Station of Rigshospitalet -Member of the Society's Scientific Council (1985-1993). -Member of the Society's Head Board (1982-1990). -Chairman of the Danish Cancer Research Association	Represented both the Rigs-hospitalet and the Society's Scientific Council	X	-	<p>Stated to the press that he worried that the Society had grown too powerful for the good of Danish cancer research: it monopolised the field. Advised the government's Privatisation Council not to sell the Finsen grounds to the Society, because if the Council did so, the centre would never get an independent, professional, scientific management that would allow researchers outside the Society to get influence on the centre, and he thus insisted that a management (the centre's adm. structure) had to be established <i>before</i> one could discuss the centre's scientific content. Høi Hansen thus acted against the politics and aims of the Society's Head Board which he had been a member of until 1990. Høi Hansen used his status in the cancer community to delay the sale of the Finsen grounds until a satisfactory mode of management was established. Pressured the Society, and used the press to direct an attack on the lack of transparency of the Society's budgets and undemocratic organisation. By using the press to affect the government's Privatisation Council to delay the sale of the Finsen and by contributing to a negative press coverage of the Society's politics and organisation, Heine Høi Hansen and his Society-critical colleagues applied pressure on the Society to establish a scientific management that would deprive the cancer charity of a great deal of power. Heine Høi Hansen and his peers put the Society in a difficult position. It could either:</p> <ul style="list-style-type: none"> • give in to the demands and lose power <p>or</p> <ul style="list-style-type: none"> • abort the plans of buying the Finsen altogether, at the risk of being portrayed in the press as the party responsible for the cancer centre not being established, which would damage the Society's reputation and perhaps even result in the management having to leave.
Elsebeth Kock-Petersen	Minister of Health (from June 3 rd 1988-December 7 th 1989)	Ministry of Health	X	-	She was interested in the Society's offer to establish a new centre for cancer research, for which her ministry did not have to contribute with much. However, she wanted to sell the Finsen grounds in open tendering because that would ensure the State a higher price on the grounds compared to the

The Cancer Centre That Never Was

	(V)				one she would get by selling it directly to the Cancer Society. This financial strategy backfired as the Society's management went to the press with the story arguing that the Minister was hindering the establishing of a cancer research centre by not allowing the Society to buy the Finsen grounds directly for this worthy purpose –thereby insinuating that she was against the anti-cancer cause.
Major Consultant, MD Ejvind Thorling	-Head of the Society's "Diet & Cancer"-program - Member of the Society's Head Board (1989-1995).	Cancer Society	-	-	Lend voice to growing criticism of the Society in the 1990 newspaper article that marked the beginning of a period with much negative press coverage of the Society's actions. Thorling was concerned about the fact that Ole Bang aside from being director of the Society, also functioned as secretary of its Scientific Council.
Ester Larsen	Minister of Health (From December 7 th 1989-January 25 th 1993) (V)	Ministry of Health	X	-	Stated that Ole Bang and the Society had not misled the Ministry of Health regarding the sale of the Finsen grounds, and that the discrepancies between the MRC and the Society was due to mere misunderstandings. She had to mediate in the matter of the sale of the Finsen and in the conflict over the management of the proposed Finsen cancer research centre. She was interested in the Society's offer to establish a new centre for cancer research, for which her ministry did not have to contribute much.
Major consultant, MD, Johannes Bock	- Obstetric Clinic, Rigshospitalet. -Chairman of the Society's Scientific Council (1988-1991) (member 1984-1992)	Cancer Society	X	-	As chairman of the Scientific Council, he initiated new talks on the management of the Finsen centre after the Society's management had withdrawn its offer to buy the Finsen grounds and the official negotiations had deadlocked in 1990. Bock took this initiative on his own without the approval of Bang and the rest of the management, and he did so because he really believed the centre would do the Danish cancer research field good.
Dr. MD, Keld Danø	Head of the Finsen Laboratory/Rigshospitalet	State/Rigshospitalet	X	-	Since the clinical units of the Finsen Institute had been moved to Rigshospitalet, Danø and his Finsen Laboratory were somewhat isolated at the Finsen area. The new centre would bring more groups to the area. Danø wanted a scientific management for the Finsen centre, so that the publicly-employed researchers could gain more influence in the completely Society-owned centre – perhaps even a post for himself – and saw Ole Bang's business methods/agenda and insistence on Society dominance of the centre as an obstacle to achieving this goal. In other words, he wanted to restructure the field of power. In 1990, he went on national television and demanded that Ole Bang resigned as Director for the Society. Danø contributed to the negative press coverage (of the Society's dealings in the purchase of the Finsen grounds, its management and politics) and used the sale of the Finsen grounds as leverage to pressure the Society into accepting and establishing a scientific management. By using the press to affect the government's Privatisation Council to delay the sale of the Finsen and by contributing to a negative press coverage of the Society's politics and organisation, Danø

The Cancer Centre That Never Was

					<p>and his Society-critical colleagues applied pressure on the Society to establish a scientific management that would deprive the cancer charity of a great deal of power. Danø and his peers put the Society in a difficult position. It could either:</p> <ul style="list-style-type: none"> • give in to the demands and lose power <p>or</p> <ul style="list-style-type: none"> • abort the plans of buying the Finsen altogether, at the risk of being portrayed in the press as the party responsible for the cancer centre not being established, which would damage the Society's reputation and perhaps even result in the management having to leave. <p>When the Society counteracted by withdrawing its offer to buy the grounds, Danø initiated new negotiations by contacting the Chairman of Society's Scientific Council, Johannes Bock. Whereas Bang and the Society used the proposed cancer centre as leverage to get the Finsen grounds, Danø and a few colleagues used the sale of the Finsen and a negative press campaign as leverage to establish a management for the Finsen centre that would allow for more influence: he thus strongly demanded that a management (the centre's adm. structure) had to be established before one could discuss the centre's scientific content.</p>
Dr. MD Mogens Spang- Thomsen	-Department for Pathological Anatomy, Medical Faculty, Copenhagen University	State/Medical Faculty	X	-	Participated in the negotiations (between the researchers only) about the Finsen centre management along with Danø, Johannes Bock, Klaus Petersen, Mikael Rørth, Elisabeth Bock, and John Philip. His interests and strategies are not explicit in this chapter, but in the transcripts the grand debate meeting, he clearly states his support for the centre. He wanted to establish a scientific management for the Finsen centre before discussing its scientific content, as this was the only way publicly-employed researchers could be persuaded to move into an entirely Society-owned research institute.
Klaus Petersen	Director of the Rigshospitalet	State/Rigs- hospitalet	X	-	Involved in the "all-researcher" discussions of the Finsen centre, but his interests and strategies are not explicit.
Professor MD John Philip	-Rigshospitalet - Member of the Society's Scientific Council (1992- 1997, chairman 1993-97).	State/Rigs- hospitalet	X	-	Involved in the "all-researcher" discussions of the Finsen centre, but his interests and strategies are not explicit.
Niels Fisch- Thomsen	-Lawyer, Society's Executive Committee (1991- 1994). -Member of the Society's Head Board (1990-1994).	Cancer Society	(X)	X	Represented the Society in the negotiations for the centre. Wanted to establish the centre at first as part of the Executive Committee's strategy to invest in real estate, but later on saw the press-mediated attacks made against the Society as the attempts of a small group of researchers to gain control of the Society's funds. For this reason he actively negotiated against the establishment of a scientific management of the Finsen that would facilitate such a coup (e.g.: they withdrew the offer to buy the Finsen grounds, added clauses to the statutes of the proposed centre management). He thought that the conflict between the Society and the small group of publicly-employed researchers

The Cancer Centre That Never Was

					was about power and money rather than the desire to build an actual research centre. He wanted to defend the autonomy of the Cancer Society, and he did definitely not want to give in to the demands of establishing a (scientific) management for the Finsen centre <i>before</i> its scientific content had even been discussed.
Peder Olesen Larsen	Director of the Danish National Research Foundation.	State	-	-	Neutral mediator at the grand debate meeting.
Arne Melchior	Member of the Government's Privatisation Council Politician (CD)	State	X	-	As a member of the Privatisation Council, he used the sale of the Finsen grounds to pressure the Society into establishing a cancer research centre with a suitable management that would allow public researchers some influence on the centre and reduce the Society's autocratic power in the cancer community. He often used the press to communicate his discontent with the Society's dealings, and when the sale of the Finsen was final in 1991 (and he thus lost his leverage) he intensified his use of the press to get his message through and thereby pressure the Society with bad publicity. He publicly cancelled his membership of the Society and urged the other 400000 members to do the same. He called the Society's management for "liars and frauds" who used indecent methods to hoodwink the government into selling the Finsen grounds to the Society without a resulting cancer research centre. He also teamed up with the group of Society-critical publicly-employed researchers (Heine Høi Hansen, Keld Danø, Elisabeth Bock, Nis I. Nissen, Jens Pedersen Bjergaard, Mikael Rørth, Jørgen Rygaard and his retired friend Jørgen Kieler) to form a common front against the Society.
Major consultant, MD, Carsten Rose	-The Oncology Department, Odense Hospital - Member of the Society's Head Board (1992-1996).	Cancer Society	unknown	Unknown	In 1991, he informed the other members of the Head Board that a petition was being circulated at the country's oncology departments to have Ole Bang fired as director and Bent Harvald fired as president of the Danish Medical Association. Interests and strategies are not known.
Professor Thorkild I.A. Sørensen	-Chairman of the Society's Scientific Council (1991-1992, member 1990-1992). - MRC professor of clinical epidemiology, Danish Research Council,	Cancer Society		X	He doubted the value of the Finsen plans, and thought that the money about to be invested in the Finsen centre could be better spent on other cancer research initiatives. He did not think the centre-idea was necessarily the best way of strengthening Danish cancer research. As chairman of the Society's Scientific Council, he initiated and organised the grand debate meeting, so that every cancer researcher in the country could express their views on the plans, and so that the Scientific Council could decide whether or not to establish the centre on the basis of these views.

The Cancer Centre That Never Was

	Copenhagen Health Services. (From 1991 at the Institute of Preventive Medicine).				
Prof. N.O. Kjeldgaard	-Former member of the Society's Executive Council (until 31 st December 1990). - Temporary head of the Fibiger Institute 1990.	Society	-	X	As the author of the Kjeldgaard Report and the report on the Rockefeller cancer centre, he was invited to speak about the history of the cancer centre at the grand debate meeting in January 1992. He no longer supported the idea of a cancer centre, as he thought the situation had changed considerably since the collapse of the Rockefeller plans. According to Kjeldgaard, the need to coordinate the cancer research groups in Copenhagen had now been reduced to a minimum, as 80 % of them were already situated under 2 km from each other at Østerbro, and none of the groups were no longer in grave need of better housing and facilities: e.g. research professor Lennart Olsson had gone to the U.S, and research professor Lars Inge-Larsson had got tenure at the State's Serum Institute. He feared that the centre had become a "white elephant", and that there were better ways of strengthening Danish cancer research (e.g. by importing international and talented research groups, as the Society was already planning to do). In this way, Kjeldgaard supported the Society's interests. The organisation had already acquired the Finsen grounds and now wanted to establish a centre for their own research groups.
Major consultant, MD, Nis I. Nissen	-The Medical Department,/The Haematological-Oncological Department, Rigshospitalet. -MRC member (1983-1987) -Member of the Society's Head Board (1982-1990)	State/Rigshospitalet	(X)	(X)	He was unhappy with the Society's proposed Finsen centre, as he thought that it did not allow publicly-employed researchers to get much influence – he thus went against the politics of the Society's Head Board, which he had been a member of until 1990. He contributed to the negative press coverage of the Society's dealings in the purchase of the Finsen grounds and actively negotiated for a scientific management of the proposed Finsen centre, and he thus insisted that a management (the centre's adm. structure) had to be established before one could discuss the centre's scientific content. At the grand debate meeting, however, he stated that he did not like the Finsen model as it lacked contact with the clinic. Being a clinician himself, he had preferred the Rockefeller model. In this respect his involvement in the criticism of the Society mirrors that of Mikael Rørth, (see above: supporting the Finsen plans, although he did not like them from a scientific point of view, in order to establish a centre with a scientific management that would give state-employed researchers some measure of influence on the Society's centre, politics and funds).
Dr Med. Jens Overgaard	Experimental Clinical oncologist at the Society's research laboratory (integrated in the Aarhus Municipal	(Cancer Society)	-	X	Speaker at the grand debate meeting, January 1992. He did not want to establish the Finsen centre, as he did not believe it was the best tool to strengthen Danish cancer research. He stated that this field needed "brains not bricks". As Kjeldgaard, he argued that the situation in the cancer community had changed since 1981, when the idea of a cancer centre was first pitched. There were no longer "homeless" cancer researchers in need of laboratory space, e.g. research professor Lennart Olsson had gone to the U.S, and research professor Lars Inge-Larsson had got tenure at the State's

The Cancer Centre That Never Was

	Hospital)				Serum Institute Overgaard may, in addition to this, have feared that a large cancer research centre in Copenhagen would deprive the provincial cancer research groups (such as his own) of funds.
Jesper Zeuthen	Researcher at the Fibiger Institute	Cancer Society	Un-certain	Un-certain	Speaker at the grand debate meeting in January 1992. He stated that unless the research groups of the centre were placed 10 metres or less apart, the synergy effect of placing group under the same roof would be lost. According to a sociological study he had got hold of, the effect was gone if the distance was over 10 metres, and in this case collaboration partners could might as well be 2 kilometres apart. Given the fact that 80% of the research groups were already situated within 2 km of each other at Østerbro, Zeuthen's statement may have been a comment on the coordination need (or lack of such) of the Copenhagen cancer research groups. Did not want to give in to the demands of establishing a (scientific) management for the Finsen centre before its scientific content had even been discussed.
Ole Bang	Director of the Cancer Society (1981-94)	Cancer Society	X (until Feb.13 th 1992)	X (from Feb.13 th 1992)	<p>He and his management used the promise to establish a cancer research centre as leverage to acquire the Finsen grounds. Much like the other members of management, he wanted the Finsen centre to be called "The Danish Cancer Society's Research Centre" for publicity purposes. He misinterpreted the results of negotiations with the other public partners or deliberately misinformed the Society's Scientific Council and the Minister of Health (Kock-Petersen) that the state-owned negotiation parties and the Society had agreed on a management for the Finsen centre in order to persuade the government's Privatisation Council to sell the Finsen grounds to the Society and also in order to persuade the Society's own Scientific Council to approve the purchase of the Finsen grounds for a cancer centre. Used the press to pressure the Minister of Health (Kock-Petersen) into selling the Finsen grounds directly to the Society and not in open tendering. He and his management did so by arguing that the Minister would be hindering the establishment of a cancer research centre if she did not sell the grounds to the Society at a reasonable price. Indicating that the minister was "against" the anti-cancer cause was an effective strategy to protect the Society's interests. He acted according to his habitus as an economist and according to the norms and goals of the Society as a private business. It would seem that the management of the Society used the promise to establish a cancer centre as leverage to acquire the Finsen grounds. (although they did want to establish a cancer research centre, just not on any terms). Did not want to give in to the demands of establishing a (scientific) management for the Finsen centre before its scientific content had even been discussed. The priority of the Society in the purchase of the Finsen was as follows:</p> <ul style="list-style-type: none"> • Making a sound financial investment. • Getting a place to coordinate the Society's own research groups. <p>Establishing a cancer research centre for both private and state-held research groups and institutions. (Although the intent to establish the centre was sincere enough, the centre was an additional bonus to the two items).</p>

Chapter 6 The aftermath

When the Finsen plans were dropped, it marked the dissolution of the path of the cancer centre. This chapter gives a brief summary of the aftermath of the failed Finsen project and some the different research political initiatives that emerged from it.

The Society's decision to follow the recommendation of the majority of the Danish cancer researchers to abandon the Finsen project provoked the small group of publicly-employed researchers who had struggled to establish a centre this time around. In particular Keld Danø was disappointed by the failed attempts to establish a *shared* centre, as he feared there would now be two smaller *competing* centres⁷¹⁸. Danø believed that Rigshospitalet would move his own Finsen Laboratory from the Finsen grounds to the state hospital's premises, and that this would create a cluster of public cancer research groups at Blegdamsvej (Rigshospitalet and the University) and a private grouping at the Society's Finsen campus⁷¹⁹.

The head of Copenhagen University, Ove Nathan, worried that the failed centre plans split the Copenhagen cancer research community in two and hoped that the researchers would learn to collaborate in spite of the unhappy circumstances⁷²⁰. If Nathan was right about the division of the cancer community, it meant that the dream of a national cancer centre had the exact opposite effect of what Engelbreth-Holm and the authors of the Kjeldgaard Report had hoped for: coordination! But contrary to popular belief, the division had not emerged as a result of the Society's latest decision alone – it had been coming for many years. In fact, the split seems to have been an inevitable facet of the dream of the centre itself, as long as the participants did not agree on the very content of it and on the way it should be managed, and that was made clear at the grand debate meeting where a majority of the country's cancer researchers had dismissed the Finsen plans and suggested that the money be spent on something else. This had resonated well with the chairman of the Society's Scientific Council who stated that the decision to abandon the centre plans was in fact good for Danish cancer research, as there was now room to find better ways to strengthen the field⁷²¹.

⁷¹⁸ NN. (1992) "Kræftcenter skrinlægges" Politiken 14.02.1992, p. 5.

⁷¹⁹ Ibid.

⁷²⁰ Dahlin, M. (1992) "Strid blandt kræftforskere" Berlingske Tidende 15.02.1992, p. 5.

⁷²¹ Simonsen, T. I. A. (1992) "Et skridt fremad" Politiken København 19.02.1992, p. 5.

The Cancer Centre That Never Was

As mentioned in the previous chapter, a small group of Society critical researchers (and their allied politicians) supported the Finsen plans despite the opinion of the majority of researchers, and their success of changing the rules and turf of the press-mediated conflict with the cancer charity had allowed them to direct attacks on the charity's morality and fulfilment of its anti-cancer cause even after their scientific colleagues had rejected the idea of the cancer centre at Finsen. This time however, the attacks were closely associated with the question of how the cancer charity would spend the money set aside for the Finsen centre. The critics had managed to attract the public eye to this matter, and in this way the continued critical press coverage can be seen as a continuance of the moral linkage between the Society and the "worthy cause" from the Privatisation Council's exemption clause, which had once before forced the Society into a "moral arena" in which its economical capital, business logic and right to act in the way it found most proper were put under severe pressure. By continuously attacking through such a "moral arena", the small group of critical researchers and politicians practiced some measure of influence on the image-sensitive charity's internal funding practices, although they legally had no right to do so. A cancer centre was no longer necessary for this influence to be practiced.

The grand debate meeting's recommendation of spending the money for the centre on as of yet unidentified initiatives to strengthen cancer research was negotiated within the Society's Executive Committee and the critics' attack of the Society – and in particular its business logic embodied by the charity's direction – was related to a parallel development in the hospital sector. The government's 1980s policy of controlling the growth of public hospital expenditures and making the hospitals more efficient through the introduction of New Public Management and privatisation efforts gained strength in the early 1990s. And in the opinion of the medical profession, this had shifted the hospitals' focus from patient treatments to economy and budgets⁷²². A first wave of prioritising between expenses for different hospital activities and services within a fixed budget was now replaced by a second wave of privatisation of hospital services (such as the sanitary area) and in 1992, the Danish Folketing decided to introduce a new tool to control public sector growth: the citizen's right to choose what hospital to be treated at. The money now followed the patient rather than the hospital, and this forced the public hospitals to compete on price and quality as seen in the private sector⁷²³.

⁷²² Jacobsen, K. and K. Larsen (2007). Ve og Velfærd - Læger, sundhed og samfund gennem 200 år. København, Lindhardt og Ringhof, p. 481.

⁷²³ Ibid., p. 486-487.

The Cancer Centre That Never Was

In this way, market conditions rather than medical experts dictated the price of health care. To the medical profession, this development made it impossible for the hospitals to develop, plan ahead or invest in new treatments and apparatus⁷²⁴. In other words, external financing such as funding from the Cancer Society was becoming increasingly important for cancer research activities at the hospitals, and as explained later on, the university researchers were experiencing similar problems. The fact that the Society's non-medical Executive Committee would probably have the last say in the matter of allocating the money reserved for the now collapsed Finsen centre plan must have been ominous to the group of critical public researchers in the light of the developments at their respective organisations, and this may be part of the reason why they continued their attacks in the "moral arena". They fought for better conditions for public cancer research.

In retrospect, the juxtaposition between these researchers on the one side and the Society's administration (and in parallel also the hospital administration) on the other was a clash of professional logics and ethical standings. Medical deontological ethics focused on the medical profession's obligation and calling to treat all patients equally and in the best possible manner as opposed to the financial prioritising and utilitarian ethics of administrators trying to spend the scarce funds on what would provide the most value for most people. It was thus not a matter of one party being ethically superior to another (and unethical) party; it was a matter of different ethical foundations leading to different lines of actions that could not easily be united in compromise. And quite similar to many ethically based debates, the media attack on the Society that happened after the collapse of the Finsen plan all came down to who had the loudest and most compelling arguments in the public opinion.

The Society's fiercest critics voiced their arguments in yet another wave of often very critical press coverage of the Society's actions⁷²⁵. The group of critical publicly-employed researchers

⁷²⁴ Ibid., p. 487.

⁷²⁵ Dahlin, M. (1992) "Strid blandt kræftforskere" Berlingske Tidende 15.02.1992, Juul-Madsen, A. (1992) "Politisk røre over nej til kræft-center" Berlingske Tidende København 15.02.1992, Jørgensen, P. S. (1992) "Arne Melchior må undskylde" Politiken København 22.02.1992, NN. (1992) "Kræftcenter skrinlægges" Politiken 14.02.1992, NN. (1992) "Nej til nyt kræft-center" B.T. 14.02.1992, NN. (1992) "Minister skuffet over Kræftens Bekæmpelse" Berlingske Tidende 17.02.1992, NN. (1992) "Kræftskandalen" Ekstra Bladet 19.02.1992, NN. (1992) "Kræftens Bekæmpelse svindler" Ekstra Bladet 27.02.1992, Simonsen, T. I. A. (1992) "Et skridt fremad" Politiken København 19.02.1992, Ziebe, H. (1992) "Forskning er vigtigere end fejder" Berlingske Tidende København 22.02.1992, Thomsen, J. (1992) "Forskere uenige om kræftcenter" Berlingske Tidende København 24.01.1992, Bentzen, S. M. (1992) "Kræftforskningsdebatten set fra sidelinjen" Berlingske Tidende København 11.03.1992, Bentzen, S. M. (1992) "Forskernes kræftstrid" Politiken København 13.03.1992, Celis, J. E. (1992) "Kaos om kræft" Politiken, Christensen, S. (1992) "Planerne om Finsen Parken skrinlagt" Politiken 15.03.1992, Clemmesen, I. (1992) "Vi vil ikke kaldes for andenrangs" Berlingske Tidende 04.03.1992, Danø, K. (1992) "Sagen om

and the politician Arne Melchior led this attack that lasted several years until the management of the Society resigned as a result of too much damaging publicity. This conflict will not be further elaborated on in this thesis, however, as it emerged from – but did not specifically concern – the plans for cancer centre. As stated in the previous chapters, the centre plans had become a tool and an occasion for debating the moral fibre of the Cancer Society and to gain some means of influence on the charity's funding practices. And although most cancer researchers in the country had discarded the idea of the cancer centre at the grand debate meeting, the concept in itself still held political leverage for the public researchers in the perpetual hunt for better funding and facilities.

The following sections *briefly* describe the different initiatives to establish “cancer centres” in the wake of the aborted Finsen plans.

6.1 The Copenhagen Comprehensive Cancer Centre

Immediately after the breakdown of the Finsen plans, the MRC attempted to establish a cancer centre *without* the Danish Cancer Society⁷²⁶. More than 10 years of planning had taught the MRC that it was not easy to find vacant research buildings for a coordinated cancer research effort, and the new centre was therefore planned to be a so-called “brick-less” co-operation between already existing research groups at Rigshospitalet and the University. If the Finsen Laboratory was moved to Rigshospitalet, the publicly-employed cancer research groups would be placed relatively close together. According to Keld Danø:

The move means that clinical and experimental cancer research will be connected once again. They have been apart ever since the patients were moved from the Finsen Institute, and we have felt the impact of that.⁷²⁷

The centre was called the *Copenhagen Comprehensive Cancer Centre*⁷²⁸, although this type of centre was not an autonomous physical unit and lacked epidemiological research to a considerable extent. But if the centre was in fact established it would be one of the largest in Northern Europe⁷²⁹. It was planned to consist of more than 1300 staff members from 14

kræftforskningscentret var ikke noget spil" Berlingske Tidende 22.03.1992, Melchior, A. (1992) "Sløser med betroede midler" Politiken København 06.03.1992, Melchior, A. (1992) "Et dansk kræftforskningscenter skal ikke forpurre" Berlingske Tidende København 06.03.1992, Nielsen, S. (1992) "Kræft, trit og retning" Politiken 01-03-1992, Sørensen, T. I. A. (1992) "Misvisende debat om dansk kræftforskningscenter" Berlingske Tidende København 10.04.1992.

⁷²⁶ Thomsen, J. (1992) "To centre for dansk kræftforskning" Berlingske Tidende København 28.02.1992, p. 4.

⁷²⁷ NN. (1992) "Kræftforskere samles på Rigshospitalet" Politiken 07.03.1992, p. 3.

⁷²⁸ Sehested, M. (1993). Copenhagen Comprehensive Cancer Center 1(1): 1-8. p. 1.

⁷²⁹ NN. (1992) "Kræftcenter sætter nålen i Europakortet" Politiken 02.06.1992, p. 2.

The Cancer Centre That Never Was

departments at Rigshospitalet, the University, Herlev County Hospital, and Bispebjerg Hospital⁷³⁰. The centre was thus the result of a new collaboration between all of these institutes and the MRC, and it was expected to have a budget of DKK 0,5 - 1 billion⁷³¹. It was to be financed through the channels that already funded the research groups and departments involved, but in addition to this, the management hoped to be able to attract additional funding from the Danish Basic Research Foundation, the Society, and the EU⁷³². The centre received wide support from the publicly-employed researchers who actively tried to make the place an international centre of excellence within such areas as e.g. clinical trial, cancer treatment, and colon, lung, and breast cancer research⁷³³.

According to one of the staunchest supporters of the project, Dr. Mikael Rørth of Rigshospitalet, the new centre plan was the best possible solution to the problem of coordinating cancer research in Copenhagen⁷³⁴. The centre was scientifically weightier than the failed Finsen centre would have been because it encompassed clinical research and patient care, and according to Rørth this also made the new centre better than the Society's current gathering of its basic research units at the Finsen area⁷³⁵. Rørth was already in dialogue with the Danish cancer researcher (and grandson of Nobel Laureate Niels Bohr) Wilhelm Bohr, who currently worked as head of a department at the prestigious NCI in the US. Rørth and the other researchers hoped that the new centre would be able to appeal to him and other prominent researchers⁷³⁶.

The Society's Fibiger Institute and Cancer Registry remained at the Finsen grounds, however, and publicly-employed researchers such as Elisabeth Bock anticipated that the new centre would only be able to collaborate with these units if the Society's management was dismissed or changed its attitude⁷³⁷. In this way, scientific coordination and political power play were mixed in the press as a prop against the Society's management. Nevertheless, the old opponents momentarily buried the hatchet in June 1992 when the new brick-less centre was established. Ole Bang welcomed the initiative, to which the cancer charity's Scientific Council already

⁷³⁰ Ibid. (303 physicians, 105 lab assistants, and 686 patient care personnel).

⁷³¹ Ibid.

⁷³² Thomsen, J. (1992) "Planer om nyt kræftcenter" Berlingske Tidende København 28.03.1992, p. 10.

⁷³³ Andreassen, M., F. Blasi, et al. (1992) "Støtter nyt center for kræftforskning" Berlingske tidende 11.03.1992, p. 8.

Amongst the supporters and active negotiators were Mikael Rørth, Elisabeth Bock, Keld Danø, Heine Høi Hansen, Nis I. Nissen, Jens Pedersen Bjergaard, J.J. Pindborg, Jørgen Rygaard, and former Society researcher Jørgen Kieler.

⁷³⁴ Thomsen, J. (1992) "Planer om nyt kræftcenter" Berlingske Tidende København 28.03.1992, p. 10.

⁷³⁵ Ibid.

⁷³⁶ Ibid.

⁷³⁷ Thomsen, J. (1992) "To centre for dansk kræftforskning" Berlingske Tidende København 28.02.1992, p. 4.

The Cancer Centre That Never Was

contributed DKK 30 million in the form of project-oriented grants-in-aid for the participating researchers⁷³⁸. And at the inauguration of the centre, the Director of Rigshospitalet Christian Nissen stated that:

The Society was partly right to fear that there would not be enough researchers interested in the Finsen Park, because the very important clinical part of the work would not be possible there. But we must conclude that private and public organisations have different goals, so even though the china has been chipped a bit in the process, we all agree that we have reached the best solution.⁷³⁹

The following year, the Society's management even asked to have the Fibiger Institute and the Cancer Registry accepted as members of the brick-less collaboration network⁷⁴⁰. This was welcomed by Mikael Rørth who wanted to work with the Society's researchers, and it was his and many other people's firm belief that Denmark was not large enough for *private* cancer research of the extent done at the Society, and that the State (i.e. the hospitals and universities) ideally ought to undertake all of the country's research within this field⁷⁴¹. According to Rørth, the political discrepancies between the Society's management and the public research organs had separated the country's only two autonomous cancer research institutes from university research and the clinic. This was very damaging to the entire field, and Rørth and his colleagues appear to have been convinced that such a thing would not have happened if the private research units had been integrated in Copenhagen University much as the Radium Stations had been made part of the State's hospital system in the 1960s. But until the Society decided to hand over the reins of the Fibiger Institute and the Cancer Registry to the State, their membership of the new "brick-less" collaboration would have to do.

Unfortunately, it was not possible to create a sufficient financial foundation for the centre right away. The "brick-less" centre did not have its own funds and thus could not be described as autonomous and separate from the organisations that had created it⁷⁴². The management of the new centre aimed at raising the necessary level of funding for the centre before long, but in October 1994 it became clear that the brick-less project was overrun and outpaced by yet another initiative for Danish cancer research: a research centre in the University's Teilm Building.

⁷³⁸ Thomsen, J. (1992) "København får center for kræftforskning" Berlingske Tidende København 02.06.1992, p. 6.

⁷³⁹ NN. (1992) "Kræft-balladen er glemt" Politiken 02.06.1992, p. 1.

⁷⁴⁰ Skovmand, K. (1993) "Kræftcenter tegner til succes" Ibid.: København 04.11.1993, p. 7.

⁷⁴¹ Skovmand, K. (1994) "Sprækker i murene" Politiken København 13.10.1994, p. 9.

⁷⁴² Skovmand, K. (1993) "Kræftcenter tegner til succes" Politiken København 04.11.1993, p. 7.

6.2 From Teilum to BRIC

From 1993-1995, the University's Medical Faculty, Science Faculty and Rigshospitalet discussed a coordination of their cancer research efforts in an entirely publicly-owned cancer centre⁷⁴³. In contrast to the Copenhagen Comprehensive Cancer Centre, the new centre was to be made of actual bricks and mortar. A special state allocation (favourable formal institutions) to the University had suddenly made it possible to plan for a centre for basic cancer research in the Teilum Building, which was situated at Rigshospitalet⁷⁴⁴. The building was vacant due to a sudden exchange of buildings between the University and the hospital, and it was planned to house the University's Protein Laboratory, its Department for Pathological Anatomy and the hospital's Finsen Laboratory⁷⁴⁵. The Head of University assured the press that if the Society's research units wanted to participate as well, this could easily be arranged⁷⁴⁶. Apart from the basic cancer research centre, the 40,000 m² large building was supposed to give room to some of the University's biomed-departments and several auditoriums and class rooms. The University desperately needed the space, given that the number of students was increasing rapidly, and it thus pushed for a speedy takeover. But the State's Building Directorate was not in a hurry to invest over DKK 250 million in the fitting of new facilities that were already present in the University's old buildings⁷⁴⁷.

The exchange of buildings and the establishment of a basic research centre therefore proved more difficult than the university had anticipated, and negotiations dragged on. The planning for the Teilum centre was eventually integrated as part of yet another set of plans, when it became clear that the cancer research groups of the planned cancer centre could be placed within an even larger centre for biotechnology – *The Biotech Research and Innovation Centre (BRIC)* – which embodied the State's attempt to establish an international centre of excellence in molecular biology and biotechnology⁷⁴⁸. A new socialist government in 1993 made biotech research a special priority, and just as the minority model of the MRC's Rockefeller Report in 1984, the planners of the BRIC saw this and tried to utilise this change of formal institutions that favoured one line of research (biotech) to include cancer research as well.

⁷⁴³ NF, SF, et al. (1995). Forskningscenter for bioteknologi. København, Københavns Universitet

Hovedstadens Sygehusfællesskab: 55.c, p. 23.

⁷⁴⁴ Skovmand, K. (1994) "Sprækker i murene" *Politiken* København 13.10.1994, p. 9.

⁷⁴⁵ Ahm, L. Ibid.: "Riget skifter image" 18.12.1994, p. 5.

⁷⁴⁶ Ibid.

⁷⁴⁷ Holst, H. L. (1994) "Kræftforskningcenter vil bytte sig til plads" *Berlingske Tidende* København 27.12.1994, p. 5.

⁷⁴⁸ Helin, K. (2004). "Bricks and Mortar." *Naturejobs* 428(238).

The Cancer Centre That Never Was

The BRIC was the result of several factors. First of all, a plan for Copenhagen University's future development was not received well by the Confederation of Danish Industry which believed that the University's plan did not offer enough potential for co-operation in areas such as biotechnology⁷⁴⁹. In other words, the industries argued that the University was no longer able to provide them with the biotechnological expertise needed to develop new products and technology. This was in part due to the fact that new and tightened requirements for safety and working environment had outdated many of the laboratories at the University's Science Faculty, so that the National Working Environment Authorities could no longer accept them. If the Faculty could not improve the condition of the labs in time, they would be shut down and be unable to deliver results. Secondly, the University decided to make biotechnology one out of three special research and development areas, as many of its researchers worked within this field – and not coincidentally – it was also a priority of the government⁷⁵⁰. Other European universities had pointed to biotechnology as the most important R&D field, and the Danish university thus followed suit by suggesting a biotechnological centre. The new centre would offer the University labs better working facilities and help strengthening the public biotechnology efforts. Along with Rigshospitalet, the University thus started collaborating on establishing a centre at Tagensvej 18, see Appendix F.

The two organisations applied for support from the State and legitimated its initiative by referring to its possible benefits for Danish agriculture, health system and industries⁷⁵¹. In their BRIC report, representatives of the University and Rigshospitalet described the centre in the following manner:

The establishment of a biotechnological centre at Tagensvej 18 is expected to greatly strengthen the Oresund region's research potential to benefit the local industries. Furthermore, it is in complete accordance with the objectives of Danish research policy and the wishes of the organisations of the labour market. The proposed centre will be visible and powerful in the European biotechnology research community and it will represent innovative thinking that is not embedded in the traditional distinction between different institutes, and thus create one great and physically coordinated research milieu with the advantages it entails. At the same time, a longtime wish to establish a cancer research centre will come true.⁷⁵²

⁷⁴⁹ NF, SF, et al. (1995). Forskningscenter for bioteknologi. København, Københavns Universitet Hovedstadens Sygehusfællesskab: 55., p. 21.

⁷⁵⁰ Ibid., p. 20.

⁷⁵¹ Ibid., p. 3.

⁷⁵² Ibid., p. 3-4.

The Cancer Centre That Never Was

In connection with the establishment of such a [biotechnology] centre, it was desired to establish a cancer research centre across the organisational boundaries. The main component of a biotechnology centre would be the Molecular Biology Department of the Science Faculty. In addition, one wished to place the Department for Pathology, Protein Lab (Medical Faculty), and the Finsen Laboratory of the Rigshospitalet there as well. These three units were meant to focus particularly on cancer research with the application of biotechnological methods in mind.⁷⁵³

Elisabeth Bock, Jørgen Rygaard and Thorkild I. A. Sørensen were involved in the planning for the new centre, just as they had been in the failed attempts to establish the respective cancer centres at the Rockefeller and the Finsen grounds. Although the new initiative was not a *cancer* centre per se, but a much broader *biotechnology* centre, the three representatives found that the solution was magnificent⁷⁵⁴. The centre's scientific profile was planned to reflect expertise in molecular biology, cell biology, and combinatorial chemistry. And the representatives considered this to be a very fruitful environment to place a cancer centre in⁷⁵⁵. Also, the centre would have sub-surface tunnels to the Medical Faculty (Panum) and Rigshospitalet, and it would therefore be in relatively close contact with the patient wards as well⁷⁵⁶.

But in contrast to the two failed cancer centres, the new biotechnology centre would be an entirely public venture. The establishment of the 33,000 m² large centre amounted to approximately DKK 664 million, and the yearly operating costs were estimated at DKK 23 million⁷⁵⁷. This was, perhaps, a very low estimate considering that the centre was planned to employ 200 researchers, 200 graduate and PhD students, and 160 technical and administrative staff members⁷⁵⁸. It was hoped that the centre would be financed mainly through the national budget and the association of Copenhagen area hospitals⁷⁵⁹.

Despite the fact that the BRIC enjoyed political support and that the new government wanted to use the centre as a tool to make Denmark one of the world's leading biotech-nations, it was difficult to procure the necessary financial support. According to an article in a local biotechnology magazine, legal wrangling and fiscal negotiations with the State meant that the

⁷⁵³ Ibid., p. 22.

⁷⁵⁴ Interview with Elisabeth Bock on February 2nd 2005.

⁷⁵⁵ NF, SF, et al. (1995). Forskningscenter for bioteknologi. København, Københavns Universitet Hovedstadens Sygehusfællesskab: 55., p. 24-29. Many of the units involved planned to work on basic biological mechanisms in cell growth and tumour development.

⁷⁵⁶ Ibid., p. 24.

⁷⁵⁷ Ibid., p. 4.

⁷⁵⁸ Københavns-Universitet (1996). Strategi for forskning og undervisning i bioteknologi. København, Københavns Universitet: 112., p. 18.

Thorhauge, C. (2003). BRIC's finansiering stadig usikker. *Regionens Biotek-Avis*. 2: 6-7., 6.

⁷⁵⁹ NF, SF, et al. (1995). Forskningscenter for bioteknologi. København, Københavns Universitet Hovedstadens Sygehusfællesskab: 55., p. 5.

The Cancer Centre That Never Was

construction of the BRIC centre was delayed again and again for many years, and the economic basis for the largest research project in Danish biomedical history was still not in place by 2003⁷⁶⁰. The constant delays frustrated researchers, research administrators, and the heads of Danish medical industries⁷⁶¹. Even though Denmark was a member of the EU, and the government had signed the so-called Barcelona covenant pledging Denmark to spend at least 3% of its gross national product on research and development, the actual combined private and public expenses for this field amounted to only 2.1 % (with less than 1% contributed by the State), and to most researchers, this financial restraint was not compatible with the government's ambition of putting Denmark on the biotech map⁷⁶².

It was argued that Denmark simply did not move fast enough to jump onboard the biotech-bandwagon and was thus in danger of being passed by⁷⁶³. In comparison, the small country of Singapore decided to invest heavily in biotechnological R & D in 2001, and only two years later it managed to establish seven skyscrapers to house a total of 1,800 researchers⁷⁶⁴. Denmark, on the other hand, had been planning the much smaller BRIC since 1995, and the first stone for it was laid in 2004 (!)⁷⁶⁵. The delay of the establishment appears to be very similar to that of the failed Rockefeller and Finsen centres. But in contrast to these two cases, the BRIC was backed by the powerful Confederation of Danish Industry which would benefit from the work done at the centre and whose interests could not easily be ignored by the government⁷⁶⁶.

In 2003 the BRIC was put on the State Budget with a yearly core budget of DKK 25 million, and in addition to this it depended on peer reviewed grants-in-aid from private foundations such as the Lundbeck Foundation, the Novo Foundation and the Cancer Society⁷⁶⁷. The centre was finally established in 2003 by the Ministry of Science, Technology and Innovation with the purpose of forming an elite centre in biomedicine and as part of the Copenhagen University with its own board of directors. The focus of the centre was basic biological research into the basic

⁷⁶⁰ Thorhauge, C. (2003). Bureaucrati forsinket BRIC. *Regionens Biotek-Avis*. 2: 7., p. 7.

⁷⁶¹ Thorhauge, C. (2003). BRIC's finansiering stadig usikker. *Regionens Biotek-Avis*. 2: 6-7., p. 7.

⁷⁶² Ibid.

⁷⁶³ Aarsland, L. (2006) "Kappestrid: Danmark på biotoget i sneglefart" *Politiken* København 26.02.2006, p.1.

⁷⁶⁴ Ibid., p. 1.

⁷⁶⁵ NN. (2004) "Nyt forskningscenter skal forbedre kræftforskning" *Urban* 12.11.2004, p. 15.

NN. (2001) "Flyttedag for kræftforskning i København" *Jyllands Posten* 05.02.2001, p. 2.

Bjerg, T. (2001) "Ti år for bio-fremskridt" *Berlingske Tidende* 26.05.2001, p. 6.

Krog, T. B. (2004) "Nu må vi snart lære at dyrke talentet" *Ingeniøren* København 21.12.2004.

⁷⁶⁶ The majority of Danish industries had not preoccupied themselves with cancer research in the 1980's, and this is why there had not been much industrial support for the plans for the Rockefeller and the Finsen centre.

⁷⁶⁷ Thorsted, C. K. (2008). "BRIC skal levere forskning i verdensklasse." *Pharma* www.bric.ku/press/in_the_media/2008/pharmadanmark2008.pdf(Oktober): 8-11, p. 10.

The Cancer Centre That Never Was

mechanisms of disease aetiology, disease causing genes, and diagnostic genetic markers for diseases such as cancer and ailments of the central nervous system⁷⁶⁸. From the very start, the centre's model was to conduct basic research, publish and patent results and use the profits to pursue commercialisation of the results in the form of new drugs⁷⁶⁹. In this way, the basic science centre was strongly linked to the Danish biotech industry which was also part of the centre's board of directors. In its first years of existence, the BRIC was moved around to different research institutes but in 2006 it was permanently housed at the top of a new Copenhagen Biocenter that provided the BRIC with 29,300 m² of top modern laboratory facilities⁷⁷⁰.

According to Bock and Danø the BRIC was the final realisation of the dream of a national cancer centre in Denmark⁷⁷¹. But was it really so? If the dream was about a comprehensive cancer centre like the one proposed by Engelbreth-Holm in 1945 and the Kjeldgaard Report in 1981, the BRIC was not the conclusion of 60 years of efforts. Firstly, the BRIC lacks epidemiological and clinical cancer research and training in order to be "comprehensive". At least, cancer epidemiology is not part of the centre's scientific profile according to its homepage. Secondly, the centre is not a co-operation between the Danish Cancer Society and public institutes, as Engelbreth-Holm had hoped for, and it has not succeeded in coordinating the entire field of cancer research in the Copenhagen area as had been the purpose of the centre proposed by the Kjeldgaard Report. In its current form, the research units of the Society are still located at the Finsen grounds. But the centre is certainly a successful result of the utilisation of formal institutions (in the form of governmental priority of biotech research) to allocate more funds into research and to get new and better facilities for basic bio-research, as had been part of the purpose of establishing the cancer research centres since the Kjeldgaard Report, and which in a likeliness was the real appeal of the centre in the first place for the group of critical researchers.

6.3 The Danish Cancer Society's Research Centre

When the Society decided to abandon the plans for a Finsen Park for both private *and* public cancer research groups in 1992, they instead established an internationally orientated cancer

⁷⁶⁸ Ibid.

⁷⁶⁹ Ibid., p. 11.

⁷⁷⁰ Ibid., p. 10.

⁷⁷¹ Interview with Elisabeth Bock on February 2nd 2005.

Interview with Keld Danø on June 3rd 2005.

The Cancer Centre That Never Was

centre for their own research and cancer education activities⁷⁷². As mentioned in the above, the Society wanted to use some of the money set aside for the abandoned Finsen Park project to strengthen Danish cancer research. To this end, the cancer charity made a bold move by importing two entire research groups from Russia and the former Eastern Germany in order to bring much-needed molecular biological expertise and international standard to the Fibiger Laboratory⁷⁷³.

The decision to import the research groups was made long before and independently of the collapse of the Finsen Park plans, however⁷⁷⁴. The newcomers conducted research within the fields of tumour biology, metastasis, and cell growths regulation and this fitted the profile of the Fibiger Institute perfectly⁷⁷⁵. The inclusion of the two research groups was part of a political strategy to increase the scientific quality of the Institute, and the management of the Society provided the two groups with ample funds so that they would not have to apply for more for several years to come. According to chairman Bent Harvald, the decision was the result of a daring science policy:

At the moment there is much talk of science policy. The described process is in reality an example of bold science policy; a massive financial and staff-wise gamble. It is this gamble (with expenditures amounting to DKK 30-40 million) that is now paying off. A gamble; that would hardly have been risked by the public authorities, but was risked by a private organisation like the Cancer Society. It is of course too early to predict the long-term consequences of the scientific progress that has already been made, but it is hoped that the research effort will rub off on and raise the bar for Danish cancer research in general.⁷⁷⁶

The idea of importing the two research groups was criticised at the time, perhaps mostly because the distribution of Society funds from the collapsed Finsen plans was therefore not allowed to be influenced by the massive media campaign against the charity. But today, all of the cancer researchers interviewed for this thesis agree that the international groups actually helped strengthening Danish cancer research. Their research resulted in important findings and prestigious publications and helped place the Fibiger Institute on the map again by attracting more international visiting fellows. So despite the fact that the Society's own cancer centre was

⁷⁷² Press release from The Danish Cancer Society, February 26th 1992. Personal papers of Ole Bang, (Copenhagen).

⁷⁷³ Thomsen, J. (1992) "Intet fælles center for kræftforskning" Berlingske Tidende København 27.02.1992c, p. 5. The research groups included e.g. Michael Strauss (Head of Department at the Max-Delbrück Centrum für Molekulare Medizin (Berlin)), Eugene M. Lukanidin and Jiri Bartek from the Laboratory of Molecular Genetics (Moscow).

⁷⁷⁴ Ziebe, H. Ibid.: "Forskning er vigtigere end fejder" 22.02.1992, p. 1.

⁷⁷⁵ NN. (1992) "Forsker lige i en hvepsere" Politiken 05.03.1992, p. 2.

⁷⁷⁶ Harvald, B. (1995) "Kræftens Bekæmpelse satsede på forskning og vandt" Berlingske Tidende 06.07.1995, p. 12.

The Cancer Centre That Never Was

no more comprehensive than the public Copenhagen Comprehensive Cancer Centre and the BRIC – and that the recommendation of the Kjeldgaard Report and the 50 year old dream of a comprehensive cancer centre was not realised to the letter – the BRIC and the private centre did strengthen Danish cancer research, and this was in fact one of the objectives of the Kjeldgaard Report of 1981. The development proved to the cancer community that there were other ways of promoting and fortifying Danish cancer research than through the physical coordination in a single, joint State-private comprehensive cancer centre. As demonstrated throughout the previous chapters, some of the actors had tended to promote the centre as the *only* attractive organisational tool.

Such alternatives were explored by the Society's Scientific Council from 1996-1998. The Council wanted to chart the ways in which the charity could further strengthen Danish cancer research in the years to come. In particular, the Council wanted to find out if organisational changes would help the Society bridge the gap between basic and clinical cancer research. Ever since the oncology departments were moved from the Finsen area, the Society's research units had been isolated from the clinical research departments and patient wards at the hospitals, and the Scientific Council now wanted to know how this could be changed⁷⁷⁷. Although 17 years had passed since the publication of the Kjeldgaard Report and its survey of Danish cancer research, some of its findings were still considered valid. For one, the Report had stated that the research performed at the Society's research units was not as good as the research performed at the hospitals and universities, and ISAC-reports from the 1980s and 1990s confirmed that this was still true for the Society's Fibiger Institute⁷⁷⁸. The import of the two Eastern European research groups was a successful strategy to overcome this problem, and by 1998 the Fibiger Institute delivered results of international standard. However, the Scientific Council wanted to make sure that the quality would be maintained in the future as well, and this demanded organisational changes.

But although at least one of the problems identified by the Kjeldgaard Report was still relevant, its idea of the comprehensive cancer centre as a way of coordinating and strengthening Danish cancer research was not. At least, the Scientific Council now felt that this solution had been depleted by many years of conflicts over failed centre plans. For this reason, the centre concept was not even listed as an option in the Council's final report in 1998. Instead, the Council

⁷⁷⁷ Bolund-udvalget: *"Rapport fra udvalg om Kræftens Bekæmpelses forskning"*, (1998). *Personal papers of Lars Bolund, (Aarhus)*. p. 2.

⁷⁷⁸ Ibid., p. 7.

The Cancer Centre That Never Was

wanted to investigate alternative solutions and focused particularly on the question of whether or not the private Cancer Society should run its own research units in the future.

As mentioned in the previous chapters, the Society had initially not wanted to operate its own research institutes as this was a costly thing to do, and because it clashed with the organisation's ambition to spearhead Danish cancer research through grants-in-aid and pilot projects and to lobby for the public authorities to assume a greater financial responsibility for all cancer research activities in the country. But in the early 1980s, Ole Bang and the rest of the Society's management became aware of the publicity value of running the units and making sure that the only fully cancer-orientated research institutes in the country were maintained which was necessary given that the State/National Board of Health did not seem eager to take over the institutes at the time. Still, advantages could only be derived from this if the research units continued to deliver quality work and avoided scientific isolation.

According to the Scientific Council this could only be done if the units engaged themselves in improved and more intensive collaborations with the extramural publicly financed research groups at the universities and the hospitals⁷⁷⁹. So if the comprehensive cancer centre was no longer an option to accommodate such a co-operation, what was? After lengthy discussions, the Council recommended that the Society's units should be integrated at the universities. This had been suggested ever since Engelbreth-Holm and the Society placed the newly established Fibiger Laboratory at Copenhagen University, and the Kjeldgaard Report had repeated the recommendation as a precondition for the establishment of a comprehensive cancer centre. Due to what the Society regarded as financial inertia on the side of the Board of Health in the 1980s and early 1990s (the Ministry's attempt to follow the governments plan of reducing the national debt by not engaging in costly projects that could be financed by others), nothing had been done about the matter. But with the new University Act of 1997, it was made possible for a private organisation to sponsor or finance an entire department or professorship at the universities⁷⁸⁰.

In this way, the cancer charity would be relieved of expenses for costly apparatus, and at the same time it would be able to channel its funds directly into research projects. Furthermore, the new act made it possible for the Society's financial engagement in the operation of the units to be gradually reduced or phased out within a trial period of 5-10 years⁷⁸¹. It was even possible to

⁷⁷⁹ Ibid. p. 10.

⁷⁸⁰ Ibid. p. 13.

⁷⁸¹ Ibid. p. 14.

The Cancer Centre That Never Was

give the department a specific name such as *The Cancer Society's Research Department at Copenhagen University*, so that the Society would be able to place its research units in the organisational framework of the University and still enjoy the publicity value of them. The Council also believed that a university-takeover of the units would make future collaborations between the country's cancer researchers easier, as a majority of the groups and institutes would thus have an academic management. It had clearly not been forgotten that the issue of management had been the bone of contention in previous attempts to facilitate private-State collaborations, and it was hoped that the proposed managerial uniformity would make such disputes a thing of the past⁷⁸². In fact, the Society's Cancer Registry and the different units of the scattered Cancer Research Institute in Aarhus had already been taken over by the State and in some cases physically integrated in universities and hospitals after 1997⁷⁸³. All that was left was the Fibiger Institute, and the Council strongly recommended the management of the Society to hand over the reins of this institute as well.

However, it seems that only the integrations in Aarhus were successful, given that the State's operation and research of the Cancer Registry was since greatly criticised by cancer researchers and the Danish Cancer Society - even in recent years. Perhaps this is not surprising, as the National Board of Health's reluctant takeover of the important health institute had been on its way for more than 25 years, and that legal wrangling and restrictive financial policies made the Society fear that it could not hand over the reins to the State without drastically impairing the working conditions and research quality of the registry⁷⁸⁴.

In a 2006 newspaper article, a group of cancer researchers expressed their fear that the quality and data of the Cancer Registry have been impaired since the institute was taken over by the National Board of Health in 1997⁷⁸⁵. At that time, the State agreed to finance 90% of the operating cost of the Registry and to implement a new electronic registration system which could coordinate all mortality, patient, and personal records in the country and thereby improve the epidemiological knowledge about cancer causation. However, finding and implementing a

⁷⁸² Ibid.

⁷⁸³ Ibid. p. 6-7.

⁷⁸⁴ Note from the Ministry of the Interior to the Danish Cancer Society, January 19th 1981. Archives of the Cancer Society, (Copenhagen).

Note from the Society: "*Cancerregisteret: en institution med sektorforskningslignende profil.*", January 10th 1995. Archives of the Cancer Society, (Copenhagen).

Intramural note from the Society: "Sundhedsministeriets opsigelse af kontrakt om drift af CR", January 20th 1995. Archives of the Cancer Society, (Copenhagen).

⁷⁸⁵ Johnsen, P. P. (2006) "Cand.Polit.'erne forstår ikke, hvad cancer er for noget" *Weekendavisen* København, p. 1.

The Cancer Centre That Never Was

new system that was as reliable as the manual registration proved more difficult than expected, and as a result more than 165,000 unprocessed death certificates and reports of cancer incidences are now piled up in the National Board of Health with the result that the Cancer Registry is no longer up to date⁷⁸⁶.

So 10 years after the State took over the Registry, cancer researchers now claimed that the constant delays of the electronic registration system rendered the epidemiological data from the highly esteemed cancer registry inaccurate, and that this has left Danish researchers without usable reference frames in their daily work. Several research projects (in e.g. the preventive effects of mammography, and an evaluation of the treatment modalities used against lung cancer) were put on hold because of the lack of accurate epidemiological data, as none of the researchers wanted to publish results based on “uncertain estimates”⁷⁸⁷.

According to physician Mark Krasnik of the Danish Lung Cancer Group, the development was “a scandal, because the Registry is the basis of all that we can do. As early as 1997, we stated that it would be wrong to move the Registry, and all of our worst fears have become real since then. Political scientists in the National Board of Health do not understand what cancer is.”⁷⁸⁸ The head of research of the Cancer Society, Jørgen Olsen, worried that the Board of Health would never be able to maintain the quality of the cancer registry, as it simply did not consider the lack of updates to be critical:

The National Board of Health is used to making statistics that show the number of people inflicted with certain diseases, their age, gender, geographical distribution, and the need for treatment modalities in different regions. One can tolerate registries that are not totally accurate in this kind of statistics. But when one is investigating the cause of cancer in the individual patient, the different stages of disease, prognosis and more; the data must be precise. I am not sure that the National Board of Health is as fierce about this as we are, because they do not have that kind of research there.⁷⁸⁹

In response to these allegations, the Board of Health’s Head of Office, Morten Hjulsgaard, stated that the board initiated several new registers each year, and that there was no reason to believe that the cancer field should be worse off than any of those; but while this was probably true and while it was understandable that the Board had to consider the needs of all medical fields, the

⁷⁸⁶ Ibid.

⁷⁸⁷ Ibid.

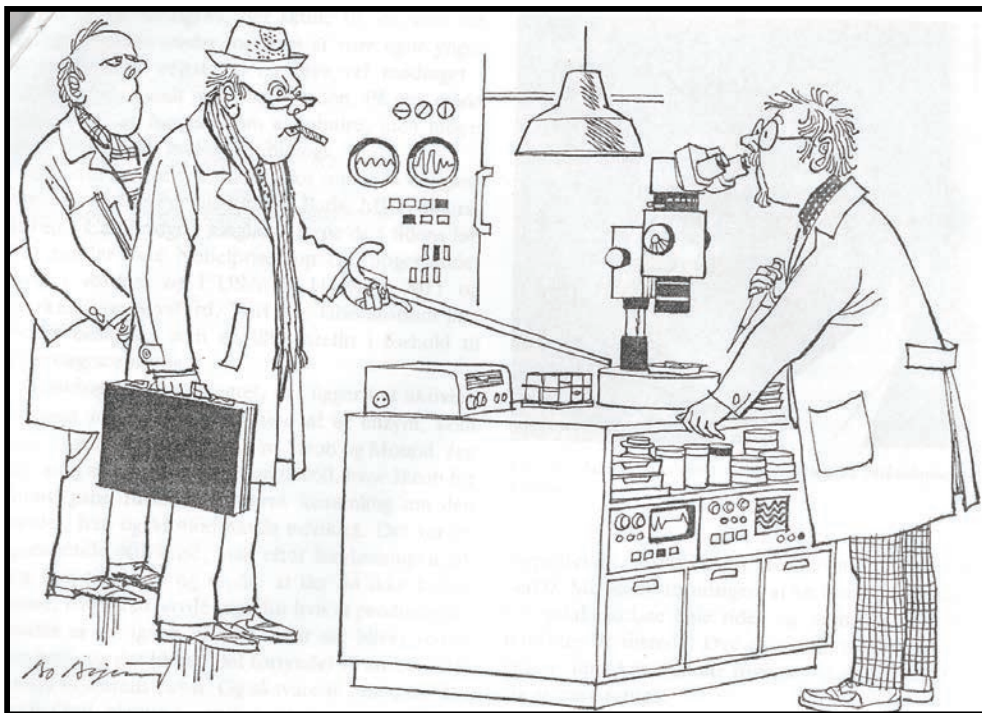
⁷⁸⁸ Ibid.

⁷⁸⁹ Ibid.

The Cancer Centre That Never Was

researchers claimed that they were witnessing the battleship of Danish cancer research turn over and sink⁷⁹⁰.

Today, the Society still owns and operates the Fibiger Institute by itself. Although it is not within the scope of this thesis to describe and analyse the events and dealings regarding the State's planned takeover of the research units or the Society's current strategy for them, it can be concluded that the Scientific Council's recommendation of giving the Society's research units an academic management marked an important break with any possible reminiscence of the "die hard" idea of a private-public comprehensive cancer centre as the only organisational tool for the coordination and strengthening of Danish cancer research.



“Such small things cannot cost big money”

Cartoon in *Naturens Verden*⁷⁹¹

⁷⁹⁰ Ibid.

⁷⁹¹ Maaløe, O. (1985). "Molekylærbiologien i Danmark." *Naturens verden*(113): 112-120, p. 116.

6.4 Summary

In a Bourdieuan/sociological perspective, the aftermath of the dissolved cancer centre path indicated the following relations:

The critique made against the Society in the press was a result of a small group of public researchers' and politicians' successful efforts to undermine the economic capital and business logic of the private cancer charity by dragging it into a battle arena that made moral arguments and accusations fair game and provided the critics with a fierce tool to hit the charity where it was most vulnerable: its image.

With this move, the critics used their cultural and social capital to secure influence on matters that went beyond the cancer charity's dealings in the matter of the Finsen centre: the introduction of the loose concept of morality in the pursuit of the worthy anti-cancer cause made it fair game to question not only the Society's moral obligation to establish a cancer centre at Finsen but also to debate the manner in which the organisation chose to spend its collected money in the war on cancer. Especially the money that should otherwise have been spent on the collapsed Finsen plans and was now free to be used on other (worthy) initiatives to strengthen Danish cancer research.

But what was such an initiative, and who could decide whether or not it was worthy and thus reflected responsible behaviour on the part of the Cancer Society? The moral arena would make the dealings of the private charity a public matter, as the Society had a responsibility to the voluntary donors that provided the financial foundation of its war on cancer. And naturally, the small group of critical public researchers had an interest in influencing what initiatives to be supported, and influence was sought through the previously successful method of voicing their moral outrage in the press against the private organisation, its management and alleged cynical and improper business logic that guided its dealings in the war on cancer. In this way, the critics had secured leverage in the form of powerful social capital that went beyond the actual establishment of the centre which functioned merely as a tool in, an occasion for, or a symbol of the battle on capital going on in the dynamic social field of the cancer community.

Eventually the public's third party enforcement in this battle reached a level that caused the Society's director Ole Bang to resign from his post, because he and the private business logics he embodied was the prime target of the press-mediated criticism that resulted in financially damaging publicity for the Society (decrease in memberships, donations etc.). The critics had

The Cancer Centre That Never Was

won the battle, but as it turned out they had not won the war. The Society chose to spend the reserved money from the Finsen plans on importing two internationally renowned international research groups in order to strengthen cancer research at the Society's own Fibiger Institute, and the private Society thus did not succumb to the pressure to allow others to dictate the how the money was to be spent. And with the money spent, the critics' leverage against the Society was depleted of power.

But even though the path of the comprehensive cancer centre had dissolved at the grand debate meeting in 1992, the idea as a tool to gain influence and wealth maximization (e.g. in the form of increased funding or improved lab facilities) had not completely died. It took on many different forms that bore very little resemblance to the original path during the 1990s and early 2000s. New formal institutions in the form of governmental and industrial focus on applicable biotech research and new strict laboratory requirements for university research allowed public researchers and administrators to plan for a basic biotech centre (BRIC), which after years of political and legal wrangling and delays was established in 2003 and eventually provided the pressured public university researchers with better laboratory facilities and funding.

Even though the BRIC was in no way comprehensive (it lacked clinical contact and epidemiological research), it was portrayed in the press as a realisation of the cancer centre, which the cancer community had been at each other's throats about. And even though the BRIC was called a biotech centre, it may have contributed to a physical coordination and Lundgrenian "institutionalisation" of at least parts of the cancer research field – the basic university researchers – in the name of biotech. In any case, it provided them with better state funding and facilities which had been a purpose of the proposed cancer centres since the Kjeldgaard Report in 1981, and which had until now been impossible due to unfavourable formal institutions, no matter how hard the different plans and surveys' rhetorical portrayal of unity (identity, collaboration etc.) in the cancer field had pressed for making cancer research in general a priority of the state.

And the field of cancer research could hardly be scientifically described as unified or homogenous, as new insight in the biology of cancer seemed to give rise to more and more research vistas every day. There was no *one or simple* way to attack the very complex cancer problem in the laboratory. And by this logic there would be no *one or simple* science policy model – like the NASA model or the idea of the comprehensive cancer centre – to organise the attack by. A change in relative prices in the form of scientific progress had made the centre idea

The Cancer Centre That Never Was

obsolete. There could be no golden and comprehensive bullet. In stead, different set ups for different research strategies had emerged.

In a path dependency perspective, the BRIC and the Society's new research groups – both scientifically successes that have strengthened Danish cancer research in each their way – cannot be regarded as continuance of the cancer centre path begun by Engelbreth-Holm and Hartvig Frisch back in 1949. In other words, this path simply dissolved in 1992 at the grand debate meeting and through the hiring of the international research groups, as this depleted the centre concept of power as leverage against the Society, and the aftermath was not a logical continuance or diverting forks of the path. The different private and public research initiatives were rather products of independent developments such as the Society's long planned initiative to import research groups to the Fibiger Institute, or a new government's financial priority of the biotech field. Other parallel paths, if you will.

The Cancer Centre That Never Was

Table 6.1: Gallery of key persons in chapter 6:

Name:	Institutional affiliation:	Summary of actions in chapter 6:
Prof. MD Keld Danø	Head of the Finsen Laboratory	Was disappointed that the Finsen plans failed. Participated in the negotiation for a brick-less centre for the public cancer research groups in Copenhagen – the Copenhagen Comprehensive Cancer Centre.
Prof. MD Mikael Rørth	-The Oncology Department 5074, Rigshospitalet. -MRC member (1987-1991, chairman 1992-1994)	Participated in the negotiation for a brick-less centre for the public cancer research groups in Copenhagen – the Copenhagen Comprehensive Cancer Centre. Stated that this plan was better than the Finsen plans as it included patient care and was owned and operated by State-held institutions.
Arne Melchior	Politician, (CD).	Was critical of the Society's management, contributed to negative press coverage until 1994.
Ole Bang	Director of the Cancer Society (1981-1994)	-
Prof MD Heine Høi Hansen	-The Radium Station of Rigshospitalet - Member of the Society's Scientific Council (1992/1993). -Chairman of the Danish Cancer Research Association	Negotiator in the planning of the Copenhagen Comprehensive Cancer Centre
Nis I. Nissen	Rigshospitalet	Negotiator in the planning of the Copenhagen Comprehensive Cancer Centre
Major Consultant, MD, Jens Pedersen-Bjergaard	-The Haematology-oncological chromosome laboratory Rigshospitalet. - Member of the Society's Scientific Council (1989-1995).	Negotiator in the planning of the Copenhagen Comprehensive Cancer Centre
Professor J.J. Pindborg	Department of Oral Pathology, Royal Dental College Copenhagen	Negotiator in the planning of the Copenhagen Comprehensive Cancer Centre
Professor MD Jørgen Rygaard	-The Bartholin Institute, Copenhagen Municipal Hospital. -Member of the Society's Scientific Council (1997/98)	Negotiator in the planning of the Copenhagen Comprehensive Cancer Centre and the BRIC.
Dr. Jørgen Kieler	Retired. Former Director of the Fibiger Institute, The Cancer Society.	Negotiator in the planning of the Copenhagen Comprehensive Cancer Centre
Professor Thorkild I. A. Sørensen	- MRC professor of clinical epidemiology, Danish Research Council, Copenhagen Health Services. (From 1991 at the Institute of Preventive Medicine. From 1993: Director of the institute) - Member of the Society's Scientific Council (1991/1992)	Negotiator in the planning of the BRIC
Professor MD Lars Bolund	-Geneticist, Aarhus University - Member of the Society's Executive Committee - Member of the Society's Head Board (from 1993).	- Author of the Bolund Report on the organisation of the Society's intramural research efforts (1998).

The Cancer Centre That Never Was

Mark Krasnik	Danish Lung Cancer Group	2006: Critical of the way in which the National Board of Health operated the Danish Cancer Research (since the State takeover in 1997).
Jørgen Olsen	Head of Research, the Cancer Society.	2006: Critical of the way in which the National Board of Health operated the Danish Cancer Research (since the State takeover in 1997).
Morten Hjulsgaard	Head of Office in the National Board of Health	2006: Dismissed critique against the Board of Health inasmuch as the Board supported many research fields, and that nothing indicated that cancer research was particularly worse off than the other fields.
Elisabeth Bock	-Professor in Cell biology, The Protein laboratory, The Medical Faculty, Copenhagen University. - Member of the Society's Scientific Council (1984-1991)	Negotiator in the planning of the Copenhagen Comprehensive Cancer Centre and the BRIC.

Chapter 7 Conclusions and perspectives

She always waited for me, a little piece away, and let on to be resting and greatly fatigued; which was a lie, but I believed it, for I still thought her honest long after I ought to have begun to doubt her, suspecting that this was no way for a high-minded bird to be acting. I followed, and followed, and followed, making my periodical rushes, and getting up and brushing the dust off, and resuming the voyage with patient confidence; indeed, with a confidence which grew, for I could see by the change of climate and vegetation that we were getting up into the high latitudes, and as she always looked a little more tired and a little more discouraged after each rush, I judged that I was safe to win, in the end, the competition being purely a matter of staying power and the advantage lying with me from the start because she was lame.⁷⁹²

(Mark Twain: "*Hunting the Deceitful Turkey*")

This thesis has focused on how an idea of a public-private comprehensive cancer centre was central to the organisation of Danish cancer research for 43 years without ever amounting to an actual centre establishment. Consequently, the focus has been the demise of an idea rather than the realisation of one. This is condensed into three main questions:

- 1) Why was the goal of building a public-private comprehensive cancer centre never reached?
- 2) Why did 43 years pass before the idea of the centre was abandoned?
- 3) And is it possible to answer these questions by merely seeing the matter as a succession of historical events, or should it be seen in the perspective of path dependence?

Question 3 has to do with the theoretical frame of this thesis, and it has to be answered first as the answer will affect the answers to questions 1 and 2.

In the introduction to this thesis, the conceptual frameworks of Douglass C. North and Pierre Bourdieu were presented as a possible approach to explaining the seemingly irrational 43 year long history of the idea of a Danish comprehensive cancer centre, which took a central stage in several decades of organising Danish cancer research; even though the idea had never paid off in the form of an actual, established centre and even though no evidence to the benefits of the centre was ever presented. A conceptual framework which, by looking at the history as a series

⁷⁹² Twain, M. (1957). "Hunting The Deceitful Turkey". *The Complete Short Stories of Mark Twain*. C. Neider. New York, Doubleday & Company, Inc..

The Cancer Centre That Never Was

of imperfect economic and social transactions guided by different sets of logics, capitals and restrictions (institutions), might lend more rational explanations to the 43 years of Danish dedication to an elusive idea of a comprehensive cancer centre – in the face of alternatives with better proof of concept – than would a traditional historical description of a straight forward succession of events and haphazard and seemingly irrational decisions. In other words, did path dependence occur and lend rationality to the history of *the cancer centre that never was*?

The answer is yes; the development does indicate the occurrence of path dependence. And how?

As mentioned in the introduction (chapter 1), economist Douglass C. North criticises neo-classical economic theory for assuming the existence of perfect markets in which zero-cost transaction is carried through by bargaining parties fully informed about each other, the transaction and its possible implications. North does not subscribe to the theory of such perfect and self-correcting markets in which it is possible to always have sufficient information about the transaction and therefore make correct decisions or suffer negative feedbacks (in the form of high transaction costs) and thus logically correct a wrong choice. Instead, North subscribes to the existence of imperfect markets and insufficiently informed choices that lend explanation to why some economies, individuals or organisations continue to “get it wrong” and – in contrast to the zero-transaction-cost-model – lock in on a series of bad choices and persistently poorly performing strategies: path dependence.

However, according to North, path dependence can only occur if such choices are made in the face of (better) alternatives. A path dependent development is thus not an inevitable result of historical progress or determinism, but one as the result of actors making deliberate choices between alternative solutions under the influence of complex institutional matrices. The story of *the cancer centre that never was* presents such alternatives at each step on the path, and the combined theoretical concepts of economist North and sociologist Pierre Bourdieu offers explanations to the constraints and logics that not only made dependence of a poorly performing path possible – but also *rational* – to the different groups of actors in this historical development. The following will illustrate and summarise the nature of this path and its demise in order to lay the foundation for answering the other two main questions of this thesis.

When the actors of the history of *the cancer centre that never was* on the surface seemed to continue to “get it wrong” and go down an irrational path planning for a cancer centre that never came to be, it is actually because the story is not really about the cancer centre as the objective

The Cancer Centre That Never Was

of and means to strengthen Danish cancer research. No, it gradually turns into a story of the cancer centre as the means to obtain other non-centre related objectives that differed in nature for the many actors. That is, the story is about the concept's transition from being a natural objective to being the means to an end: a tool.

The concept was transformed from being a concrete plan for a cancer centre, as set forth loosely by Engelbreth-Holm in 1945 and established as a path through the setting of favourable formal institutions by Minister of Education Hartvig Frisch in 1949, to being a tool in the struggle for material or symbolic resources in the social field of the cancer community during the 1980s and 1990s. So, although the path did never in the 43 years of its existence yield pay offs in the form of an actual, established cancer centre and the desired coordination of Danish cancer research, the lock in on the path made sense as it paid off in other ways when the concept of the cancer centre was turned into a tool to obtain other objectives than an actual cancer centre: such as a group of researchers' influence on the distribution of more State and/or private discretionary funds for (their) cancer research, making cancer research a priority of the State, a way of opposing the trend of New Public Management in the public hospital sector, and a cancer charity's pursuit of a new investment strategy to secure wealth maximization and continued support of the anti-cancer cause. The fact that the idea of the cancer centre was only aggressively promoted in times of unfavourable formal institutions – and not in the era of unique State supported expansion of science, medicine and their respective organisations from the mid 1950s to the early 1970s – supports this theory.

Planning for different cancer centres for so many years in spite of the lack of success made sense for the actors inasmuch as the pay offs from staying on the path took on many other forms relating to the actors' individual objectives and agendas. That is not, however, the same as saying that the path was successful, because the choices to continue planning for cancer centres rather than pursuing other alternatives with better proof of concept turned out to be rather costly for some of the actors – in the form of e.g. bad PR, dented reputations, decreasing charital contributions, a higher prize on the Finsen lot, and disappearing incentives for cross-organisational collaboration. The alternatives presented along the path may have been less costly in time and money and would incidentally have been able to better serve the official objective of strengthening Danish cancer research. The following presents a short overview of the different steps along the way of the cancer centre path, the alternatives presented to the steps, and the transition of the cancer centre concept from an end to a means.

The Cancer Centre That Never Was

The cancer centre as the primary objective of the planning process:

The inauguration of the Fibiger Lab 1949:

Cancer researcher Engelbreth-Holm presented a scientifically motivated “comprehensive cancer centre” model inspired by American cancer centres in order to strengthen Danish cancer research and the anti-cancer cause in 1945. At this time, the complexity of the cancer problem was not fully understood, and a unified attack in the form of a comprehensive cancer centre must have made scientific sense. Formal institutions in favour of this proposal were set by Minister of Education Hartvig Frisch in 1949, as he made an unprecedented move of agreeing to a part State, part privately financed cancer institute with the potential to eventually expand into a comprehensive centre as proposed by Engelbreth-Holm.

The move was unprecedented as the government’s financial policy at the time did not gravitate toward the support of science, but Frisch managed to carry through the motion because the establishment of a part privately financed strategic research institute with potential socio-economic outputs in the form of better cancer treatment fitted the governmental policy (institutional matrix) through e.g. the promise of reduced public expenditures for treatment of cancer patients.

However, the agreement was not observed due to different factors as e.g. the death of Frisch, and a consequently entirely privately financed realisation of the plan was continuously delayed or made impossible over the next 30 years due to building restrictions preventing the establishment of fitting buildings, and the move of the Finsen hospitals clinical departments. One may argue that such obstacles would hardly be insurmountable for the determined mind. If a cancer centre was really believed to promote better cancer research and treatment than the existing setup, one would be tempted to think that such an important societal contribution would not be stopped by the death of one man or by building restrictions. So perhaps the belief in and the drive behind a centre – unifying all aspects of the cancer fight – was not as comprehensive as its scientific scope. And why is that?

In the 1950s, a new government and favourable economic conjunctures kick-started an era of excessive state investment in science, medicine and the establishment of hospitals and scientific institutes, that made a predominantly privately financed centre more superfluous inasmuch as both the public and the private research groups and clinics for such a centre were given good facilities at their respective institutes. That is, cancer researchers were given good facilities within the “mother” disciplines and specialities such as e.g. physiology and biochemistry. There

The Cancer Centre That Never Was

was no need to advocate for special terms and funds for the cross-disciplinary, un-institutionalised, and umbrella-like cancer research. There was no need to change the formal institutions that had suddenly favoured scientific expansion from the 1950s and forth. The centre itself had served as a tool to change once unfavourable institutions for science in general back in the 1940s. In an institutional perspective, the path was created by the scientific vision of professor Engelbreth-Holm and the unprecedented move in 1949 by Minister Hartvig Frisch to co-support a private cancer charity in the establishment of a cancer centre in times of lacking governmental support for science. In other words, a cancer centre became a tool to change formal institutions.

Cancer research was specifically favoured by this arrangement, not the traditional university-based disciplines and specialities it springs from. In essence, this institutional change favoured a strategic scientific focus on cancer research, and on an organisational level this favoured the Danish Cancer Society and Copenhagen University who lend money and room, respectively, to the new organisation. But shortly after the inauguration, Frisch passed away and took the State support with him as his government had never fully supported his initiative. That is, the formal institutions for a specific cancer centre changed and the expansion of the first instalment of the original plans stagnated.

Shortly after, a new government created new formal institutions in favour of science in general – not cancer activities specifically – by investing heavily in new facilities for science and education as part of a strategy to boost Danish economy and competitive position. Inspired perhaps by post-war research policy trends from the US, the investments were not targeted at research most likely to yield industrially or medically applicable results, whereas the now stagnated cancer centre initiative had been promoted for its expected societal value of research based cancer treatments in times of strict governmental financial policy. During the 1950-1970-period of newfound wealth in Danish science, the institutional matrix did not favour specialisation in cancer research, neither through the establishment of a cancer centre, nor through the “institutionalisation” of cancer activities as an independent university discipline or medical speciality, because the practitioners of cancer fighting activities were given good facilities and funding possibilities through their current disciplinary and organisational affiliation.

There were no incitements to change this arrangement by promoting a cancer centre, even though it would have very well been the best time in the history of Danish science to ask for

The Cancer Centre That Never Was

public support for such a thing! And this is an important point. The formal institutions may have favoured a specialisation *had the need for one been promoted*, but it was not. At least not wholeheartedly by others than the Cancer Society. The university and hospital researchers working on cancer problems apparently did not exhibit the need to invoke a special “cancer research” identity. One can thus argue that it was the *informal* institutions that were not in favour of the establishment. Still, the Danish Cancer Society upheld its ambition of creating a cancer centre through decades of different types of obstacles, as one might expect from an organisation dedicated to the anti-cancer cause and whose survival and powers were closely linked to public and private awareness of cancer research as an individual entity and the perpetuation of the now outdated formal institutions for State collaboration once created by Hartvig Frisch.

Nevertheless, this institutional mis-match lend very little promise of success for the Society’s attempts to actualise the original vision of a comprehensive cancer centre, and when the Society finally equipped labs at the Finsen grounds in the 1970s, the small Finsen hospital and its clinical wards were moved to Rigshospitalet, and a comprehensive centre was no longer possible. The Society ended up with a research unit and bricks and mortar which was not in accord with the charity’s spearhead ambition to primarily support the anti-cancer cause through grants-in-aid.

In the terminology of North, the Cancer Society employed an erroneous strategy to perpetuate the institutional matrix that had once been favourable towards its strategic aim and purpose, and it devoted resources to prevent any alteration that threatened its survival through this strategy. However, the Society’s aim to keep the centre dream alive (as it embodied the favourable institutions and State-collaboration the charity fought for) by financing it until the State would yet again support the original arrangement was a very risky and costly strategy for a modest charity whose only income consisted in voluntary contributions from the man on the street. A later lack of support from the cancer researchers thwarted the Society’s efforts to utilize the institutional matrix surrounding the state financed scientific expansion in 1950-1970, as the researchers’ tastes and preferences did not gravitate towards a specific cancer centre at the time.

In this respect, the Cancer Society was the one to stay on the path of the cancer centre during the era of expansion. The one party that did not correct its erroneous strategy in the face of institutional mismatch. The reason for this was that while a centre was never established, the Society linked the plans with positive PR for the organisation. One can only speculate if the PR gains to be made financially outweighed the costs of pursuing the centre dream and operating

The Cancer Centre That Never Was

research units as part thereof. Had the charity been a business in a competitive market, its strategy may have been changed faster. But it was a foundation depending on voluntary contributions from the public (mostly oblivious to the strategic elements of cancer research organisation) and not on traditional trading. It was not corrected by the market or its contributors.

Alternative:

1. The Society could have chosen to strengthen cancer research through support of the research at the private Fibiger lab at its intermediate location in Lyngby, which was favoured over the prospects of a cancer centre at the Finsen grounds by the charity's own researchers.
2. The Society could have chosen to channel its funding into the existing cancer related research environments at the universities and the hospitals and thereby act in concert with the State-dictated formal institutions (the science push model as promoted by Vannevar Bush) and informal institutions by public scientists and medical researchers, who either intendedly or unintendly supported this basic science approach to problem solving (including the cancer problem) in times of superfluous State support and scientific expansion.

The cancer centre concept as a tool to obtain other objectives:

- a) *The Kjeldgaard Report of 1981:* The era of almost unlimited State support for science and medicine came to an end in the early 1970s and a subsequent financial recession resulted in restrictive national financial policy with the purpose of zero-growth of public expenditures in the Danish hospital sector. In other words, unfavourable formal institutions for both science and medicine in general and for cancer research and the centre dream. Nevertheless, a survey report on cancer research initiated by the State's Natural Science Research Council revived the idea of a cancer centre by recommending that a series of comprehensive cancer centres be set up in connection with the country's medical faculties.

The recommendation was one out of many that all had the purpose of making cancer research a (special) priority of the State and thus secure better funding, new facilities and subsequently status for the field. It is important to note that although "cancer research" is

The Cancer Centre That Never Was

an umbrella-like name for a very heterogeneous range of basic and clinical research activities with often little common ground, the Report used the undiversified rhetoric to signal unity and thus the potential of fruitful cross-collaboration which could bring about the supposed socio-economic benefits from bridging the gap between bench and bedside: applied research = better cancer treatments = less public expenditures. This line of arguments was used as selling points to the politicians in order to secure better State funding for cancer research. And this is a markedly different research policy than the science-push model of the era of scientific expansion. Targeted research to solve societal problems like the cancer scourge.

A recommendation of a public-private comprehensive cancer centre was made despite the fact that the Report's statistical material concluded that peer-reviewed and grants-in-aid funded research at public research institutes (not primarily dedicated to cancer research in specific) delivered better research than that at the private research units of the Cancer Society, and that channeling funds into a physical centre would not necessarily be the right way to strengthen Danish cancer research (chapter 3). However, this point was never made in the Report and it was ignored by both public researchers and the Danish Cancer Society who supported the official recommendations of a centre in order to secure better funding for cancer research, better public lab facilities, and a State takeover of the Society's research units (because the operation of research units was not then considered an optimal use of the Society's scarce funds).

In an institutional perspective, this was the Society acting in accordance with its organisational need to re-actualise the formal institutions set by Hartvig Frisch in 1949 for state-collaboration on the anti-cancer cause. A perpetuation of the institutional matrix that was in sync with the Society's strategic research policy and spearhead ambition to hand off its initiatives to the State. Again, it seems that the end of an era of State supported scientific expansion had left Danish researchers without as favourable terms (formal institutions) as before. The notion of promoting special terms for the umbrella-like "cancer research field" emerges in this context in the form of a recommendation of a new organisational setup and new funding needs in addition to the existing research environments and funding thereof.

The Report proposed a centralising comprehensive cancer centre which had not received overwhelmingly enthusiastic backing during the time of scientific expansion and which

The Cancer Centre That Never Was

was now in the 1980s not supported by statistical evidence of its virtue. It seems that the need for unifying and centralising the very heterogeneous cancer fighting efforts – physically, institutionally and terminologically – is a phenomenon closely linked to times of scarce funding and unfavourable formal institutions towards a broader science push policy. That is, the centre and a unified front for the broad scope of cancer fighting activities (that assumably held great value for society in the fight against cancer) became a strategy to appeal for public support and State funding for something “worthy” and “additional” to the existing system. A strategy that possibly held more potential than appealing for more funding for the existing setup of non cancer specific university disciplines and medical specialities that may not have held special public appeal or societal promise.

In an institutional perspective, the Report embodied a reaction to the State-dictated change of formal institutions in the form of restrictive financial policies, altered research policy and dramatic cutbacks in science funding. It embodied a change in the informal institutions created by the organisations (universities, hospitals etc.) and the affiliated researchers inasmuch as rhetorics of a unified cancer field was suddenly emphasised and plans for a cancer centre were proposed. With this change, the organisations and their individual stakeholders (the public researchers working on cancer problems) were suddenly working in institutional accord with the Danish Cancer Society who, as mentioned in the above, had worked for a centre during the scientific expansion even in the face of the unfavourable informal institutions created by the former group. The path of the cancer centre suddenly received wide support from the cancer community for different reasons and was re-actualised through the creation of common informal institutions to challenge the new State-dictated formal institutions. It was a matter of actors regrouping to counteract the institutional changes that could threaten their continued existence.

Alternative: The Report’s own data implied that Danish cancer research could be strengthened through increased public and private grants-in-aid to peer-reviewed research. This piece of statistical data was ignored by the authors and most recipients of the Report, which favoured the idea of a comprehensive cancer centre. An idea that was supported by the researchers’ subjective opinions rather than actual statistical data. The path was thus re-actualised.

The Cancer Centre That Never Was

b) The Rockefeller Centre (1984-1986):

The centre-recommendation of the Kjeldgaard Report was continued in a MRC-led planning group of representatives from the public and private organisations in the cancer community, which was given a mandate by the Minister of Education to plan for a cancer centre at the Rockefeller building at Rigshospitalet. The green light for planning was given, however, on the one condition that no additional funding would be needed for the establishment of the centre. This condition was in accordance with the government's policy of keeping the growth of public expenditures at a minimum, which meant that investments in new centres, hospitals, were not top priority. Notwithstanding this policy, the MRC planning group proposed a comprehensive cancer centre to which the State had to contribute funds for the modernisation and equipment of new laboratory facilities in the Rockefeller building: a blatant attempt to secure additional State support for better lab facilities which most public cancer researchers were in need of as their current labs were getting worn-down and needed new and expensive apparatus to keep up with the developments of cancer research. And this could not easily be obtained through the basic budgets of the hospitals or the universities.

The planning continued without any security of this additional State support – which the Minister had not yet approved and which the formal institutions worked against. A centre would most likely have to be established for the funds already allocated to cancer research through the public basic budgets of Rigshospitalet and the University, the basic budgets of the private Cancer Society's research units, and through grants-in-aid from the State's research councils and the Society's Scientific Council. A zero-sum game. In other words, only if the MRC-led planning group managed to do what the Kjeldgaard Report had not been able to and change the formal institutions to make cancer research and a cancer centre special financial priorities of the State, would the centre hold any value for the planning parties as a means to secure additional State funding to the field.

The centre supposedly held scientific value if, in fact, there was proof of concept that a comprehensive cancer centre was a good way of coordinating Danish cancer research and bridging the gap between the heterogeneous lines of cancer research. But although the final MRC report on the Rockefeller model used the same simplified rhetoric of unity in the field as the Kjeldgaard Report had done, the MRC report did not focus on identifying a specific unifying research program to bring about these outputs that would

The Cancer Centre That Never Was

justify the establishment of a centre in the first place. The lack of focus on content reflected how difficult it would actually be to prioritise between the many lines of research through the identification of a common program, as this move would inevitably lead to the exclusion of some aspects and research groups. A potential conflict was brewing.

The planning parties preferred to discuss a potential centre's managerial model rather than its content. The international (American) experiences with planning for cancer centres in the 1970s had otherwise been to firstly identify content and secondly form in order to lay the foundation of a viable and successful centre. The lack of focus on the content of the proposed Rockefeller centre indicates that a coordinating comprehensive cancer centre was not so much planned for its scientific virtues as it was planned as a tool to try to make cancer research a priority of the State by the means of increased State funding and through a State takeover of the Cancer Society's research units – however unlikely this would seem under the current formal institutions.

Meanwhile, an economist entered the private Cancer Society as its director, and due to his business logic, skills and the public dissatisfaction with the government's strict financial prioritising within the health care sector (informal institutions in the form of the taste and preferences of the public), the private cancer charity managed to increase its income through aggressive fundraising, increased number of memberships and private donations, and through a series of new business-inspired strategies to protect the charity's capital against the inflationary pressure of the 1980s economy. The private Cancer Society underwent a transformation from being a modest charity with limited funds and power to support the anti-cancer cause (and therefore being dependent on the Rockefeller centre as a tool to try to change the formal institutions towards more State involvement in the cause) into being a modern corporate charity with substantial funds (economic capital) which made it very powerful as the major funding body of the cancer community.

The economic capital became symbolic capital of the social field of the cancer community. And with the transformation, the Society's strategy and goals changed as well. The institutional matrix (governmental strict financial policy, the goodwill of the public) thus did not point to the Rockefeller centre as the tool to best serve the anti-cancer cause. The matrix had already rewarded the Society for sticking to another

The Cancer Centre That Never Was

business inspired strategy in the form of increasing returns: public goodwill and donations. Instead of aiming at an unlikely State takeover of the Society's research units during times of recession, the Society learned that its research units held PR value that could increase the success of its fundraising activities. Also, the investment in bricks and mortar that the Society had previously regarded as unfavourable to the anti-cancer cause (as it tied up money that could otherwise have been used directly on research through grants-in-aid) was now seen as a safe way of protecting the Society's capital against unstable economic conditions so that the anti-cancer cause would continuously have funds for the years to come, even though the voluntary contributions should suddenly come to an end. This had also been the case in the 1970s but now the organisation had the professional management to execute such a strategy correctly. The institutional matrix therefore pointed to a continuance of the Society's investment strategy and to a defection from the Rockefeller plans, and the Society defected with the official explanation that the scientific expansion of its research units could not be accommodated by the Rockefeller plans. With the Society's defection, the plans were not pursued.

In an institutional perspective, the concept of a cancer centre became the turning point of a multilevel interaction between different layers of institutions. It became the never-intended-to-materialize means to promote change instead of the natural end of the efforts. On a global level, a financial crisis influenced the national level at which the Danish government strived to formulate strict financial policy and research policies that changed the formal institutions towards less favourable conditions for actors on the organisational level. Here, different organisations either changed informal institutions in the form of strategies that would help them secure funding for their research areas/organisations (the University, the hospitals) by challenging the formal institutions that threaten their existence, or they simply maintained slightly out of sync-strategies from before (the Danish Cancer Society). At the time of the Kjeldgaard Report, these strategies were momentarily united in the plans for a cancer centre using unifying rhetorics about scientific scope and value of cancer research and the research groups across the different organisations in the field. A rhetorical trick used by early molecular biologists (like the author of the Kjeldgaard Report) from the 1930s and onwards in order to make molecular biology an independent scientific discipline with independent

The Cancer Centre That Never Was

budgets at universities world wide⁷⁹³. However the common front to use the idea of a centre reflected many different strategies, agendas and scientific scopes: an internal mismatch of informal institutions that would make the centre plans difficult to begin with. As new actors on the individual level brought with them new competences and tastes and preferences, this level influenced the organisational level as well (e.g. Ole Bang's managerial style and the Society's subsequent shift of strategy to utilise existing national and global level institutions).

Alternative: The minority model of the MRC-report, which suggested a patent-financed biotech centre in accord with the formal institutions of the time. A centre that, by choosing to focus on biotech, may have had a much broader scientific scope and which discarded the idea of a *comprehensive cancer* centre, but which would have been more likely to bring about State-funding for at least some cancer research groups through already existing State biotech programs, as biotech was already a financial priority of the State, e.g. the formal institutions supported this model. "Biotech" is a unifying term, but unlike "cancer" it is somehow wider in scientific scope, as researchers can work on many different themes and diseases. Although cancer is a common term for over 200 diseases, each with their natural history, "biotech" is still wider as it refers to a technological and methodological approach rather than a disease-specific and lends more freedom to its researchers as it does not come with the same inherent public expectation of the researchers benefitting from each other and having direct synergy as with "cancer research". The biotech alternative was not considered interesting by the majority of the planning group, though, and the path for a cancer centre was perpetuated despite the lack of proof for the plan's benefits for cancer research as neither a scientific centre nor a tool to secure more State funding.

c) *The sale of the Finsen campus and the proposal of a Finsen centre (1986-1992)*

When the Society defected from the Rockefeller plans in 1986, the decision evoked anger amongst the immediate planning parties, but it did not result in a broader public critique of the private cancer charity. The charity's participation in the Rockefeller centre would have been costly, as the charity's research units would have to be moved from their current locations and into new and fitted laboratories. In this way, the plans

⁷⁹³ Nielsen, A. K. and M. L. Thomsen (2006a). "I det biokemiske og molekylærbiologiske spændingsfelt". Viden uden grænser 1920-1970. H. Nielsen and K. H. Nielsen. Aarhus, Aarhus Universitetsforlag: 183-200

The Cancer Centre That Never Was

equalled a financial transaction for the charity. But this transaction was never legally and contractually enforced in the sense of neo-classic economy, and there was thus nothing to hinder the Society's defection. That is, except for the social aspects of the transaction.

The charity was widely dependent on its image in the public eye, and the defection would only be costless if the Society's image remained squeaky clean, and the public believed the charity to serve the best interest of the anti-cancer cause with the defection. The fact that the disgruntled planning parties did not question this matter publicly after the defection indicates that the Society's wealth equalled symbolic capital and power in the cancer community. The Society's plans to carry out its new investment strategy by buying the Finsen campus and establishing a privately led and financed cancer centre there – with public research groups as tenants only – led to the proposal of what was later called the Finsen centre. A centre that was not comprehensive as it was removed from the clinical hospital department and the medical faculty at the Rockefeller location. A centre that, for this reason, could not coordinate all clinical and basic aspects of cancer research as had been the original sales-pitch argument to the State in the Kjeldgaard Report and the MRC-report. Still, the original planning parties from the Rockefeller plans continued negotiating for a Finsen centre despite its lack of clinical content and ability to coordinate Copenhagen cancer research in general.

And yet again, the negotiations were on form (management models) rather than on scientific content, and this supports the thesis that the centre was not in itself the primary objective to all of the planners, it was a tool to 1) realise the Society's investment strategy, or 2) to ensure additional funding and better lab facilities for some public research groups. Seeing that the Society was now the major funding body and power broker of the cancer community compared with the State's research councils (see figure 4.1 and 4.2 of chapter 4), the tool was now used against the Society and not the State in order to follow the money.

In an institutional perspective, the Society's strategy was now somewhat out of sync with the informal institutions created by the organisational and individual levels of the planning parties, but it was not hindered by the formal institutions set by the government's economical policy and research policy or the opportunities created by the 1980s economy. However, the establishment of the centre and the realisation of the Society's investment strategy depended on a State sale of the Finsen campus to the

The Cancer Centre That Never Was

cancer charity, and the State was therefore still an active player in the story of the cancer centre. In its attempts to purchase the Finsen property at the lowest possible price, the Society used the press to voice moral arguments (informal institutions in the form of public taste and preferences) to make the government use a special exemption clause that allowed the government to sell the lot to a single party with a special worthy cause for buying. That is, a clause that could prevent the Society from having to bid for the lot in open tender in direct competition with other interested parties and buy it at a presumable much higher price, which would otherwise have been in the interest of the government who's policy was to privatise the public sector or to make it act in accordance with market principles to ensure efficient operation and competition.

The Society's use of moral arguments to push for a sale via the exemption clause proved to be a can of worms for the private charity, as it irreversibly linked a purchase of the Finsen campus with a moral obligation to establish a cancer centre. And not just *any* cancer centre the private charity could think of. No, it had to be a privately financed cancer centre in which public researchers were given equal influence. This was not in the interest of the Society that stood to lose influence of its tool and funds, and the public planning parties jumped at the chance to use this linkage as leverage against the charity to ensure such influence.

And this time around these public planning parties used the press and the public as third party enforcement to pressure the Society to establish a centre. After lengthy press-covered debates on the matter, the Society eventually opted to buy the property without the use of the exemption clause (and thus no legal obligation to establish a centre), but by that time the moral linkage between sale and centre was so firmly established in the minds of the public through the critical press coverage and the actions of a small group of public researchers and politicians that any attempt to justify the Society's choices (as guided by business logic of the DJØF professional group) was drowned by the voices, medical & scientific logic, and deontological moral arguments of its critics. In other words; informal institutions as rationalities worked against the Society. The economic capital of the Society was undermined in the social field of the cancer community, in which the social and cultural capital of the public researchers was now instated as predominant currency by the public opinion (in the form of decreasing donations, figure

The Cancer Centre That Never Was

4.1, chapter 4), and the centre plans were now used as tools to discuss the morality of the Society in general and influence its funding practices.

In a final attempt to dismantle the moral debates and bring focus on what should have been the real crux of the matter – cancer research in a proposed centre – a grand debate meeting between all Danish cancer researchers was set up by the Society in early 1992. Here a majority of all Danish cancer researchers rejected the Finsen plans, as attention was finally brought to the matter of its inferior/lacking scientific content. The content-less set-up of the centre proposal was considered anachronistic to modern Danish cancer research that, as years had passed, was no longer as financially pressed as in the early 1980s with regards to housing and facilities, and which no longer naturally subscribed to shared housing as the only means of coordination and cross-collaboration. Also, it was argued that scientific breakthroughs of uncovering the oncogene paradigm (a change of relative prices) and increasing computational power had changed the nature of cross-disciplinary collaboration making a centre of bricks and mortar an outdated facilitator of this type of collaboration. The majority agreed that the money allocated for the proposed centre could be used to strengthen Danish cancer research in other – as of yet unidentified – ways. The 6 year old plan was therefore revealed as a content-less power prop, and the path of the cancer centre dissolved with no identified alternative paths to follow.

In an institutional perspective, the Cancer Society was skilled in utilizing the possibilities for economic growth made possible by the institutional matrix where the State's cutbacks on health services and research (formal institutions) gave rise to a change in the public's taste and preferences favouring the private cancer charity's worthy activities (informal institutions). But when it pushed the envelope to far, the informal institutions were affected by orchestrated media campaigns and backfired for the cancer charity. Finally, the debate meeting buried the centre plans with a reference to the fact that all relevant inhabitants of a centre now had better facilities than they did at the start of the planning process in the 1980s. Again, the need for a unifying centre and rhetorics was subdued in the face of other funding possibilities. The only purpose the centre-concept could now have for the public researchers, who had worked to turn the public attention towards the supposedly shady dealings of the Cancer Society, would be

The Cancer Centre That Never Was

a means to get some moral influence on the use of the Society money reserved for the centre.

- d) *The aftermath (1992-)*: The use of the money reserved for a Finsen centre became a bone of contention between the private cancer charity and its publicly employed critics. Again, these critics used the press to voice their points of view, and this hurt the image and earnings of the charity (see figure 4.1, chapter 4) during and after the negotiations for the Finsen centre. A logical use of the money could have been what the Kjeldgaard Report's statistics had (unwillingly) pointed to in 1981, namely peer-reviewed grants-in-aid that seemed to yield research with the most international impact (see figure 3.2, chapter 3). Instead, the Society chose to continue its longstanding plan of improving the research quality at its own research unit, the Fibiger Institute, by importing and financing two eastern European research groups of great international standing in order to strengthen its own strategy and research based war on cancer (better private research, better publicity).

In this perspective, a cancer centre was no longer needed as a pretext or a tool to carry out the Society's strategies to serve the anti-cancer cause optimally. As for the charity's public critics, the centre was no longer a necessary tool or occasion for them either, as their success in setting new rules and securing power in the social field (the moral arena) had allowed them to attack the Society's internal funding practices and the moral fibre of its director through the press even without the centre as focal point.

But although this strategy hit the Society financially and image wise, the charity did not succumb to the pressure in the matter of the use of the reserved money. The leverage of the tool thus lost value against the Society, although it did result in the resignation of the Society's director who had been the main target of the press-mediated criticism.

The centre concept resurfaced in two public initiatives, though they bore no resemblance with the original dream or path other than by name and press-rhetorics: the Copenhagen Comprehensive Cancer Centre and the Biotech Research Innovation Centre (BRIC). These initiatives were marketed as realisations of the original centre dream in spite of a lack of definition correlation between these and the original cancer centre dream (there was nothing comprehensive about the two). The concept and history of the cancer centre path was used as a way to make the State secure better facilities and funding for cancer

The Cancer Centre That Never Was

research in times of – yet again – unfavourable institutional constraints, as new and restricted work environment legislation had suddenly made many public research labs unable to be up to code. While the former network-based initiative never managed to secure State funding, the latter (BRIC) enjoyed more favourable institutions in the form of a governmental priority of the biotech field, which allowed the centre to be planned although financing arrived only much later in 2003.

It was a centre that bore remarkable resemblance with the basic idea of the 1984 MRC-report's minority model of a biotech centre, inasmuch as the BRIC prioritised content (basic biotech focus on cancer and diseases of the central nervous system) and employed a patent-based financing model and established strong links to the Danish biotech industry. Through the BRIC, many cancer researchers have obtained better facilities as was one of the objectives of establishing a cancer centre in the 1980s and 1990s. However, this was achieved only under a headline with more political power and attraction and less conflicting scientific content than “comprehensive cancer research”, namely “basic biotech”.

In conclusion, the history of *the cancer centre that never was* can be explained more nuancedly than just a succession of historical events through the perspective of path dependence. As has been shown in the previous chapters, the development fits the path dependence criteria as set forth by Douglass C. North, as there were real and perhaps better alternatives to the path along the way. The reason why these alternatives were not followed would at first sight seem irrational, but by using the theoretical concepts of North and Bourdieu, it has been revealed in the previous five chapters how the centre plans were never just about establishing a centre; the plans were tools to obtain different and sometimes opposing objectives of the planning parties.

North has provided economical concepts to show how a pursuit of these objectives was made possible or impossible by different constraints (institutional matrices) and has thus provided some measure of “meaning” or rationality of the actors' choices in terms of what they gained from following an otherwise irrational path with no payoffs in the form of an actual centre. Bourdieu's concepts of dynamic social fields, forms of capital and professional logics fits well with North's institutional perspective and offers an explanation to how a small group of public researchers could possibly undermine the Society – a major power broker in the cancer community – by dragging it into a moral arena. That is, how the “human factor” of insufficiently

The Cancer Centre That Never Was

informed transactions led to power struggles affecting the sometimes unpredictable informal institutions and thus the actors' pursuit of conflicting objectives. Or in other words; how the story of the cancer centre was not a single level problem with a single level explanation (e.g. State-dictated formal institutions in the form of lack of funding undermined the centre), but on the contrary it would seem that everchanging informal institutions played a much bigger role in the the matter across the boundaries between different organisations and individuals.

Together, the conceptual frameworks of these theoreticians have revealed the cancer centre concept as a tool rather than a primary objective; as a power prop depleted of scientific content, which is the reason why the alternatives to the path were not followed and which is why the path eventually dissolved when the prop was stripped of its power.

Up until the sale of the Finsen grounds, the path was perpetuated by the Danish Cancer Society. And why?:

- a) From the 1949 – 1981: The Society was an oldfashioned physician-operated fund, whose spearhead ambition of supporting initiatives and making them a state responsibility was awarded with the unprecedented State co-support for the Fibiger Lab in 1949. Even though this support did not survive the death of its creator, Minister Hartvig Frisch, the Cancer Society kept the idea alive, even though the formal institutions no longer favoured it. It employed an erroneous strategy out of sync with the institutional matrix even during the scientific expansion 1950-1970, where it was not the formal but the informal constraints (in the form of lack of researchers backing the centre plans) that hindered the organisation in realising a quite costly dream for modest charity to carry through on its own. According to neo-classical economical theory, the decision to continue down the path inspite of unfavourable institutions should have resulted in a market punishment and correction of the action. It did not. The path continued. Perhaps because a charity in itself depended more on informal institutions (the publics contributions and goodwill) than on formal ones and market efficiency. At least, this may have been true back then.
- b) 1981-1986: The proposed Rockefeller centre would serve the Society's cause and strategy for handing over its research units to the State.
- c) 1986-1992: The Society gained power, wealth and new business competences and shifted strategy regarding its research units and capital protection and wanted to use the

The Cancer Centre That Never Was

centre concept as a pretext to acquiring the Finsen grounds to fulfil the strategies. Therefore, it stayed on the path. Parallely to this, public researchers used the now scientifically deployed centre plans as leverage against the Society to gain influence on the use of its funds. For this reason, they stayed on the path though none of the parties find the centre plan's scientific content favourable for the official purpose of it all: coordinating the Copenhagen area cancer research. Once the Society had bought the Finsen campus, it had no further use for the dream of the cancer centre as a power prop and could benefit from bringing attention to its lack of content through the grand debate meeting at which the centre dreams were laid to rest. This fitted the Society's strategy well, as it wanted off the path of the cancer centre.

In essence, the centre became a tool to fulfil changing and often conflicting agendas that had very little to do with the centre concept itself. A path was perpetuated, and even when the Cancer Society no longer needed the tool (1991/92), others picked it up and momentarily prevented the Society from getting off the path even though it wanted to, until the cancer charity put a stop to all leverage against it by using its funds to import two Eastern European research teams, thereby stripping the prop of its power as leverage. And although the power prop was aired again, the aftermath of the history did not provide a continuance of the dissolved path, as it was now used against the State to appeal for funds, not against the Society who was no longer vulnerable to it. Also, the proposed centres were not form or content-wise in accordance with the original definition of a comprehensive cancer centre.

Only one of the centres was established, as a biotech centre, because it played into favourable formal institutions that prioritised the biotech field, rather than using the battered concept of a cancer centre to change formal institutions and make cancer research a State priority. Perhaps it was easier to create a centre research program under wider scientific scope of the term "biotechnology" which denominates a shared set of methodological approaches to very heterogeneous research objects, than in the failed cancer centres. In a BRIC centre, the matter of "content" would therefore not be as controversial, and a match of formal and informal institutions favouring the establishment was more likely from the beginning.

And this leads us to the answering of the two other main questions of this thesis:

The Cancer Centre That Never Was

1) Why was the goal of building a public-private comprehensive cancer centre never reached?

The short answer is that if the centre ever had a chance, it was in 1949 when the idea managed to change formal institutions in the form of unprecedented State support from Minister of Education Hartvig Frisch – in spite of a restrictive research support policy in his government. However, the centre was not completed for various reasons following this event: initial unfavourable formal institutions after the death of Minister of Education Hartvig Frisch, a lack of aggressive promotion of the centre in the 1950-1970 era that provided formal institutions for unprecedented medical and scientific expansion at the public universities and hospitals (which therefore reduced the public need of private funds from the Society and a private-public centre solely dedicated to cancer), building restrictions and a move of the Finsen hospital in the 1970s which impeded the Cancer Society's attempts to establish a centre on its own.

In the era of sufficient support for basic research in all its variety (a science push policy), there was no need amongst the researchers dealing with cancer problems to unite and plead for special terms, as they were given satisfying working conditions in the non-cancer specific departments, disciplines and specialities to which they were affiliated. The transaction costs for orchestrating cancer research as a unified field with a separate budget and physical frames on a par with the university disciplines and medical specialities it springs from may have been too high considering the potential difficulties agreeing on a common scientific scope of such an arrangement for the extremely heterogeneous cancer field. Informal institutions in the form of the researchers' tastes and preferences therefore worked against the centre. When funding once again became a major issue after the first and the second oil crisis (and corresponding unfavourable formal institutions in the form of strict State research funding policies), the need to promote cancer research as a unified and especially deserving field arose. A rhetoric that seems to be heavily dependent on the flux of the nation's financial- and research policies.

However, the attempt of different individuals and organisations in the cancer field to change formal institutions backfired, as the united front in reality consisted of conflicting agendas, rationalities/logics and scientific scopes. It was an internal institutional mismatch with little promise of success, and the centre plan became a tool to serve conflicting agendas of the planning parties rather than a shared objective embodying scientific coordination in the cancer field. When the Society finally dismantled the tool, the concept of a cancer centre had lost both relevance and power, and the path dissolved.

The Cancer Centre That Never Was

2) Why did 43 years have to pass before the idea of the centre was abandoned?

From the theoretical perspective of this thesis, the answer to this question is as follows: The path of the cancer centre may, on the surface, seem irrational because it never paid off in the form of an actual cancer centre. However, by employing the concepts of North and Bourdieu it seems that the path paid off in different ways and on different levels than through the establishment of an actual centre, because the involved actors had other objectives and reasons for supporting a cancer centre than what was formally presented as the primary objective: the scientific coordination of cancer research in Copenhagen. And as these objectives were either reached or finally given up due to (institutional) change in the original premises for promoting a centre, the centre concept had outplayed its role, use and value to all. The fact that the battle to obtain these different and often conflicting objectives were played out in a moral arena kept the actors locked-in on the path for a very long time, as they each displayed different logics and types of ethical arguments that could not easily lead to compromises.

So in short, unfavourable institutions in the form of an unobserved agreement between the State and the Society in the 1950s, a lack of active promotion and interest from relevant researchers who enjoyed sufficient funding elsewhere (informal institutions/taste and preferences of researchers) , financial and architectural constraints in the 1960s, and a move of the Finsen hospital in the 1970s had prevented the plans from being carried out when the centre was still about coordinating cancer research. When the idea was revisited and converted into a power prop in the 1980s, it was used by the Cancer Society to serve its own strategy for survival in times of public scrutiny and by public researchers to re-negotiate the distribution of the cancer charity's funds and power. The leverage depletion of the prop took approximately 10 years.

Outro: perspectives on the cancer centre model

In the previous chapter, various initiatives in the wake of the Finsen collapse have been presented. None of these initiatives resemble the original concept of a comprehensive cancer centre unifying bench and bedside in the war on cancer. Still, these initiatives have contributed greatly to Danish cancer research and made their marks internationally as well. These initiatives vary in their set ups, their research profiles, their association to the pharmaceutical industry etc. They represent very different approaches to the cancer problem both scientifically and organisationally. All things considered, it would seem that there is no single model for

The Cancer Centre That Never Was

organising cancer research. In fact, the idea of a targeted approach in the form of a comprehensive centre might actually have complicated the war on cancer greatly in Denmark.

The idea of the centre was inspired by targeted projects such as the Manhattan Project and NASA's efforts to put a man on the moon, and the idea of the cancer centre have been alluring to many political stakeholders in the world: If you can split the atom and put a man on the moon, surely we can find a cure to cancer...? But whereas the Manhattan Project and the Moon Mission was, roughly speaking, a matter of translating well-developed scientific theories into "hardware", the matter of finding a cure for cancer has revealed itself to be a bit more complex. For one thing, the theoretical framework for understanding cancer was not at all in place when the idea of a cancer centre was presented, and scientific progress in the field has since revealed an increasing complexity in the problem of human cancers. All things taken into account, there may be as many types of cancers as there are cancer patients, as recent discoveries indicate that the patient's unique physiological constitution greatly influences the development and possible treatment of a cancer. And previous targeted efforts to find a cure – a golden bullet – for cancer now seems a little naive.

And so does the organisational tool behind these efforts, the comprehensive cancer centre. Perhaps the umbrella-like concept of cancer is not explored optimally if you limit yourself by applying stiff notions on what is appropriate and comprehensive research. On what the balance should be between e.g. bench, bedside, and pharmaceutical companies. Or between private and public research. Or on how this research should best be housed, financed and coordinated with other lines of research. The idea of a short time targeted effort in a set environment (a centre) is understandably politically alluring, but it may in fact be the death of the scientific diversity that is assumably necessary for solving the many problems of human cancers. And as current research opens our eyes to the increasing complexity of cancers, we must appreciate the many different approaches to the multifaceted problem. In this light, it seems only natural to abort the simplified science policy tools of the past, as they are in danger of over-simplifying the war on cancer in the hunt for deceitful turkeys, golden bullets, political paroles and money. Fortunately, this was done in the cancer community after a lengthy walk down the path of the cancer centre.

Nevertheless, the idea of using the targeted approach of NASA and the Manhattan Project on societal problems is still in vogue amongst political stakeholders in Denmark today with respect

The Cancer Centre That Never Was

to such complex issues as the innovation of the public health care sector⁷⁹⁴. One can only hope that they have sufficiently considered the theoretical maturity and complexity of this field before locking in on the political solution, and that 40 years do not have to pass before alternatives are considered.

⁷⁹⁴ Horn, U. (2012) "Regeringen vil rydde op i innovationspuljer" Børsen

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Appendix A : List of abbreviations

ACS: *The American Cancer Society*

BRIC: *The Biotech Research and Innovation Centre* (Copenhagen, Denmark)

ISAC: *International Scientific Advisory Committee* (used by the Danish Cancer Society)

MRC: The Danish Government's *Medical Research Council*

NCI: *The National Cancer Institute* (U.S.A)

NSRC: The Danish Government's *Natural Science Research Council*

UICC: *The International Union Against Cancer*

Appendix B: List of interviewees¹

Ole Bang

Elisabeth Bock

Johannes E. Bock

Lars Bolund

Keld Danø

Peter Ebbesen

Jes Forchhammer

Bent Harvald

Niels Ole Kjeldgaard

Jørgen Kieler

Bodil Norrild

Jørgen Rygaard

Mikael Rørth

Tove Smidth (via telephone)

Thorkild I.A. Sørensen

¹ The Danish minister of Education and Research, Bertel Haarder, was asked to participate as well, but he declined in a letter dated 20th January 2006.

Appendix C:

1) List of the members of the central organs of the Danish Cancer Society 1981-1998

&

2) List of members of the MRC and the NSRC 1981-1998

1: The Danish Cancer Society

1981-82:

Director: Ole Bang

The Head Board:

Professor, MD, Steen Olsen (Chairman)
Lawyer Steen Helmer Nielsen (Vice chairman)
Professor, MD, Erik Amdrup
Major Consultant, MD, A.P. Andersen
Professor, MD, Helge Baden
Chief Psykologist Jørn Halberg Beckmann
CEO, E. Haunstrup Clemmesen
Mrs. Kirsten Damgaard
Mrs. Ulla Fasting
Major Consultant, MD, Heine Høi Hansen
Mrs. Eline Haugstrup
Pastor M.K. Hvalsøe
Bank CEO A. Jacobsen
Former town clerk, G. Lindkær Jensen
Professor of molecular biology, Niels Ole Kjeldgaard
Professor, MD, S. Kaae
Mrs. Ulla Lambertsen
Major Consultant, MD, Finn Landvall
Major Consultant, MD, C.M. Madsen
Head Nurse Birgit Maarup
County Major Jens M. Nielsen
Major Consultant, MD, Nis I. Nissen
MD Hans Agerlin Petersen
Mrs. Vera Rasmussen
Social worker Hanne Reintoft
Editor Sv. Aage Toldsted
Major Consultant Harvey Vennits
Professor, MD, Aage Videbæk

The Executive Committee

Professor, MD, Steen Olsen (chairman)
Lawyer Steen Helmer Nielsen (vice chairman)
Professor Niels Ole Kjeldgaard
County Major Jens M. Nielsen
Social worker Hanne Reintoft

The Scientific Council

Professor, MD, Erik Amdrup (chairman)
Head of department, Dr.phil, Jes Forchhammer
Professor, MD, Eyvind A. Freundt
Professor, MD, Bent Harvald
Major Consultant, MD, Ole Møller Jensen
Professor, Martin Ottesen
Major Consultant Arne Sell
Professor, MD, Georg H. Stakemann
Major Consultant, MD, Arne Svejgaard
Professor, MD, Aage Therkelsen
Head of Department, MD, E.B. Thorling

1983-1984:

Director: Ole Bang

Head Board:

Professor, MD, Steen Olsen (Chairman)
Lawyer Steen Helmer Nielsen (Vice chairman)
Major Consultant, MD, A.P. Andersen
Chief Psykologist Jørn Halberg Beckmann
Mrs. Kirsten Damgaard
Environmental consultant Jørgen Elikofer
Mrs. Ulla Espersen
Mrs. Ulla Fasting
Major consultant, MD, Hanne Sand Hansen
Major Consultant, MD, Heine Høi Hansen
Mrs. Eline Haugstrup
Pastor M.K. Hvalsøe
Bank CEO A. Jacobsen
Former town clerk, G. Lindkær Jensen
Professor of molecular biology, Niels Ole Kjeldgaard
MD Jan-Helge Larsen
CEO K.E. Larsen
Major Consultant, MD, Finn Lundvall
Major Consultant, MD, C.M Madsen
CEO Erik Møllerup
Head Nurse Birgit Maarup
Major Consultant, MD, Nis I. Nissen
MD Hans Agerlin Petersen
County Major Kresten Philipsen
Mrs. Vera Rasmussen
Social worker Hanne Reintoft
Editor secretary Bent Skar
Captain Chr. Stentoft
Editor Sv. Aage Toldsted
Mrs. Helga Valstorp
Major Consultant Harvey Vennits

The Executive Committee

Professor, MD, Steen Olsen (chairman)
Lawyer Steen Helmer Nielsen (vice chairman)
Professor Niels Ole Kjeldgaard
County Major Kresten Philipsen
Social worker Hanne Reintoft

The Scientific Council

Professor, MD, Erik Amdrup (chairman)
Major consultant, MD, Johannes E. Bock
Major Consultant, MD, Peter Ebbesen
Head of department Jes Forschhammer
Major Consultant, MD, Heine Høi Hansen
Major Consultant, MD, Ole Møller Jensen
Major Consultant, MD, Jørgen Kieler
Associate professor, MD, Staffan Magnussen
Associate professor, Dr.phil., Bodil Norrild
Major consultant, Arne Sell

1985 (pr 31st December 1984):

Director: Ole Bang

Head Board:

Professor, MD, Steen Olsen (Chairman)
Lawyer Steen Helmer Nielsen (Vice chairman)
Major Consultant, MD, A.P. Andersen
Chief Psykologist Jørn Halberg Beckmann
Mrs. Kirsten Damgaard
Social worker Mrs. Eva Dejgaard
Environmental consultant Jørgen Elikofer
Mrs. Ulla Espersen
Mrs. Ulla Fasting
Major consultant, MD, Hanne Sand Hansen
Major Consultant, MD, Heine Høi Hansen
Mrs. Eline Haugstrup
Former town clerk, G. Lindkær Jensen
Professor of molecular biology, Niels Ole Kjeldgaard
MD Jan-Helge Larsen
CEO K.E. Larsen
Major Consultant, MD, Finn Lundvall
Major Consultant, MD, C.M Madsen
CEO Erik Møllerup
Head Nurse Birgit Maarup
Head Nurse Kirsten Bork Nielsen
Major Consultant, MD, Nis I. Nissen
MD Hans Agerlin Petersen
County Major Kresten Philipsen
Mrs. Vera Rasmussen
Mrs. Kristine Rasmussen
CEO, engineer, Leif Rasmussen
Social worker Hanne Reintoft
Editor secretary Bent Skar
Captain Chr. Stentoft
Editor Sv. Aage Toldsted
Major Consultant Harvey Vennits

The Executive Committee

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Lawyer Steen Helmer Nielsen (vice chairman)
Professor Niels Ole Kjeldgaard
County Major Kresten Philipsen
Social worker Hanne Reintoft

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Professor, MD, Erik Amdrup (chairman)
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Major Consultant, MD, Peter Ebbesen
Head of department Jes Forschhammer
Major Consultant, MD, Heine Høi Hansen
Professor, MD, Bent Harvald
Major Consultant, MD, Ole Møller Jensen
Major Consultant, MD, Jørgen Kieler
Associate professor, MD, Staffan Magnussen
Associate professor, Dr.phil., Bodil Norrild
Major consultant, Arne Sell
Associate professor, MD, Hans Sjöström

1986 (pr 31st December 1985):

Director: Ole Bang

Head Board:

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Lawyer Steen Helmer Nielsen (Vice chairman)
Major Consultant, MD, A.P. Andersen
Chief Psykologist Jørn Halberg Beckmann
Mrs. Kirsten Damgaard
Social worker Mrs. Eva Dejgaard
Mrs. Ulla Espersen
Major consultant, MD, Hanne Sand Hansen
Major Consultant, MD, Heine Høi Hansen
Mrs. Eline Haugstrup
Professor of molecular biology, Niels Ole Kjeldgaard
MD Jan-Helge Larsen
CEO K.E. Larsen
Bank cashier Aase Lindestrøm
Head of department Knud Erik Linius
Major Consultant, MD, C.M Madsen
CEO Erik Møllerup
Head Nurse Birgit Maarup
Secretary Bent Nielsen
Head Nurse Kirsten Bork Nielsen
Major Consultant, MD, Nis I. Nissen
MD Hans Agerlin Petersen
County Major Kresten Philipsen
Mrs. Kristine Rasmussen
CEO, engineer, Leif Rasmussen
Social worker Hanne Reintoft
Editor secretary Bent Skar
Journalist Tove Smidth
Mr. Søren Stauning
Editor Sv. Aage Toldsted
Major Consultant Harvey Vennits

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Lawyer Steen Helmer Nielsen (vice chairman)
Professor Niels Ole Kjeldgaard
Social worker Hanne Reintoft

The Scientific Council

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Major consultant, MD, Johannes E. Bock
Major Consultant, MD, Peter Ebbesen
Head of department Jes Forschhammer
Major Consultant, MD, Heine Høi Hansen
Professor, MD, Bent Harvald
Major Consultant, MD, Ole Møller Jensen
Major Consultant, MD, Jørgen Kieler
Associate professor, MD, Staffan Magnussen
Associate professor, Dr.phil., Bodil Norrild
Major consultant, Arne Sell
Associate professor, MD, Hans Sjöström

1987 (pr 31st December 1986):

Director: Ole Bang

Head Board:

Professor, MD, Steen Olsen (Chairman)
Lawyer Steen Helmer Nielsen (Vice chairman)
Major Consultant, MD, A.P. Andersen
Chief Psykologist Jørn Halberg Beckmann
Mrs. Kirsten Damgaard
Social worker Mrs. Eva Dejgaard
Mrs. Ulla Espersen
CEO Kurt Fromberg
Major consultant, MD, Hanne Sand Hansen
Major Consultant, MD, Heine Høi Hansen
Mrs. Eline Haugstrup
Professor of molecular biology, Niels Ole Kjeldgaard
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CEO K.E. Larsen
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Major Consultant, MD, C.M Madsen
CEO Erik Møllerup
Head Nurse Birgit Maarup
Secretary Bent Nielsen
Head Nurse Kirsten Bork Nielsen
Major Consultant, MD, Nis I. Nissen
MD Hans Agerlin Petersen
County Major Kresten Philipsen
Mrs. Kristine Rasmussen
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Journalist Tove Smidth
Mr. Søren Stauning
Editor Sv. Aage Toldsted
Major Consultant Harvey Vennits

The Executive Committee

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CEO Kurt Fromberg
Professor Niels Ole Kjeldgaard
Journalist Tove Smidth

The Scientific Council

Professor, MD, Erik Amdrup (chairman)
Associate professor, MD, Reidar Albrechtsen
Major consultant, MD, Johannes E. Bock
Major Consultant, MD, Peter Ebbesen
Head of department Jes Forschhammer
Major Consultant, MD, Heine Høi Hansen
Professor, MD, Bent Harvald
Major Consultant, MD, Ole Møller Jensen
Associate professor, MD, Staffan Magnussen
Associate professor, Dr.phil., Bodil Norrild
Major consultant, Arne Sell
Associate professor, MD, Hans Sjöström

1988 (pr 31st December 1987):

Director: Ole Bang

Head Board:

Professor, MD, Steen Olsen (Chairman)
Lawyer Steen Helmer Nielsen (Vice chairman)
Chief Psykologist Jørn Halberg Beckmann
Mrs. Kirsten Damgaard
Social worker Mrs. Eva Dejgaard
Mrs. Ulla Espersen
CEO Kurt Fromberg
Major consultant, MD, Hanne Sand Hansen
Major Consultant, MD, Heine Høi Hansen
Mrs. Eline Haugstrup
Professor of molecular biology, Niels Ole Kjeldgaard
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Major Consultant, MD, C.M Madsen
CEO Erik Møllerup
Head Nurse Birgit Maarup
Secretary Bent Nielsen
Head Nurse Kirsten Bork Nielsen
Major Consultant, MD, Nis I. Nissen
MD Hans Agerlin Petersen
County Major Kresten Philipsen
Mrs. Kristine Rasmussen
Editor secretary Bent Skar
Journalist Tove Smidth
Mr. Søren Stauning
Editor Sv. Aage Toldsted
Major Consultant Harvey Vennits

The Executive Committee

Professor, MD, Steen Olsen (chairman)
Lawyer Steen Helmer Nielsen (vice chairman)
CEO Kurt Fromberg
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Journalist Tove Smidth

The Scientific Council

Professor, MD, Erik Amdrup (chairman)
Associate professor, MD, Reidar Albrechtsen
Major consultant, MD, Johannes E. Bock
Major Consultant, MD, Peter Ebbesen
Head of department Jes Forschhammer
Major Consultant, MD, Heine Høi Hansen
Professor, MD, Bent Harvald
Major Consultant, MD, Ole Møller Jensen
Associate professor, Dr.phil., Bodil Norrild
Major Consultant, MD, Torsten Landberg
Associate professor, MD, Hans Sjöström

1989 (pr. 31st December 1988):

Director: Ole Bang

Head Board:

Professor, MD, Bent Harvald (*New Chairman*)

Lawyer Steen Helmer Nielsen (Vice chairman)

Chief psykologist Jørn Halberg Beckmann

Mrs. Kirsten Damgaard

Mrs. Ulla Espersen

CEO Kurt Fromberg

Major consultant, MD, Hanne Sand Hansen

Major Consultant, MD, Heine Høi Hansen

Secretary Niels-Jørgen Hilstrøm

Mrs. Alice Jørgensen

Professor of molecular biology, Niels Ole Kjeldgaard

MD Jan-Helge Larsen

CEO K.E. Larsen

Bank cashier Aase Lindestrøm

Head of department Knud Erik Linius

CEO Erik Møllerup

Head Nurse Birgit Maarup

Head Nurse Kirsten Bork Nielsen

Major Consultant, MD, Nis I. Nissen

Professo, MD, Steen Olsen

County Major Kresten Philipsen

Mrs. Kristine Rasmussen

Mrs. Kirsten Blume Schmidt

Editor secretary Bent Skar

Journalist Tove Smidth

Mr. Søren Stauning

Major Consultant, MD, E.B. Thorling

Editor Sv. Aage Toldsted

The Executive Committee

Professor, MD, Bent Harvald (*new chairman*)

Lawyer Steen Helmer Nielsen (vice chairman)

CEO Kurt Fromberg

Professor Niels Ole Kjeldgaard

Journalist Tove Smidth

The Scientific Council

Major consultant, MD, Johannes E. Bock (*new chairman*)

Associate professor, MD, Reidar Albrechtsen

Major Consultant, MD, Peter Ebbesen

Head of department Jes Forschhammer

Major Consultant, MD, Heine Høi Hansen

Major Consultant, MD, Ole Møller Jensen

Major Consultant, MD, Torsten Landberg

Head of department Staffan Magnusson

Associate professor, Dr.phil., Bodil Norrild

Major consultant, MD, Jens Pedersen-Bjergaard

Associate professor, MD, Hans Sjöström

Director Ole Bang (as secretary)

1990 (pr. 31st December 1989):

Director: Ole Bang

Head Board:

Professor, MD, Bent Harvald (*Chairman*)
Chief psykologist Jørn Halberg Beckmann
Professor, MD, Mogens Blichert-Toft
Lawyer Niels Fisch-Thomsen
CEO Kurt Fromberg
Major H. Thustrup Hansen
Major consultant, MD, Hanne Sand Hansen
Major Consultant, MD, Heine Høi Hansen
Mrs. Inger Hee
Secretary Niels-Jørgen Hilstrøm
Mrs. Alice Jørgensen
Professor of molecular biology, Niels Ole Kjeldgaard
Department chief, veterinarian, Ib Knudsen
Nurse Vera Kristensen
Cashier Bent Lassen
Professor, MD, Ulrik V. Lassen
Bank cashier Aase Lindestrøm
Head of department Knud Erik Linius
CEO Erik Møllerup
Former major Agnethe Nielsen
Head Nurse Kirsten Bork Nielsen
Major Consultant, MD, Nis I. Nissen
Professo, MD, Steen Olsen
County Major Kresten Philipsen
Mrs. Kristine Rasmussen
Mrs. Kirsten Blume Schmidt
Editor secretary Bent Skar
Journalist Tove Smidth
Vice major Inger Stad
Mr. Søren Stauning
Major Consultant, MD, E.B. Thorling

The Executive Committee

Professor, MD, Bent Harvald (*chairman*)
Lawyer Steen Helmer Nielsen
Professor, MD, Ulrik V. Lassen
Professor Niels Ole Kjeldgaard
Journalist Tove Smidth
Major H. Thustrup Hansen

The Scientific Council

Major consultant, MD, Johannes E. Bock (*chairman*)
Associate professor, MD, Reidar Albrechtsen
Major consultant, MD, John Christiansen
Major Consultant, MD, Peter Ebbesen
Head of department Jes Forschhammer
Major Consultant, MD, Heine Høi Hansen
Major consultant, MD, Torsten Landberg
Head of department Staffan Magnusson
Associate professor, Dr.phil., Bodil Norrild
Major consultant, MD, Jens Pedersen-Bjergaard
Associate professor, MD, Hans Sjöström
Professor, MD, Thorkild I. A. Sørensen

1991 (pr. 31st December 1990):

Director: Ole Bang

Head Board:

Professor, MD, Bent Harvald (*Chairman*)
Professor, MD, Mogens Blichert-Toft
Professor, MD, Peter Elsass
Lawyer Niels Fisch-Thomsen
CEO Kurt Fromberg
Professor arin Hammer
Major H. Thustrup Hansen
Major consultant, MD, Hanne Sand Hansen
Mrs. Inger Hee
Secretary Niels-Jørgen Hilstrøm
Mrs. Alice Jørgensen
Department chief, veterinarian, Ib Knudsen
Nurse Vera Kristensen
Cashier Bent Lassen
Professor, MD, Ulrik V. Lassen
Bank cashier Aase Lindestrøm
Head of department Knud Erik Linius
CEO Erik Møllerup
Former major Agnethe Nielsen
Head Nurse Kirsten Bork Nielsen
County Major Kresten Philipsen
Mrs. Kristine Rasmussen
Mrs. Kirsten Blume Schmidt
Editor secretary Bent Skar
Journalist Tove Smidth
Vice major Inger Stad
Mr. Søren Stauning
Major Consultant, MD, E.B. Thorling
MD Ivar Østergaard
Mrs. Karna Østergaard

The Executive Committee

Professor, MD, Bent Harvald (*chairman*)
Journalist Tove Smidth
Lawyer Niels Fisch-Thomsen
Professor, MD, Ulrik V. Lassen
Vice major Inger Stad

The Scientific Council

Major consultant, MD, Johannes E. Bock
(*chairman*)
Associate professor, MD, Reidar Albrechtsen
Major consultant, MD, John Christiansen
Major Consultant, MD, Peter Ebbesen
Major Consultant, Md, Heine Høi Hansen
Major consultant, MD, Torsten Landberg
Associate professor, Dr.phil., Bodil Norrild
Major consultant, MD, Jens Pedersen-Bjergaard
Associate professor, MD, Hans Sjöström
Professor, MD, Thorkild I. A. Sørensen
Major Consultant, MD, Jens Vuust

1992 (pr. 31st December 1991):

Director: Ole Bang

Head Board:

Professor, MD, Bent Harvald (*Chairman*)
Professor, MD, Mogens Blichert-Toft
Professor, MD, Peter Elsass
Lawyer Niels Fisch-Thomsen
CEO Kurt Fromberg
Professor Karin Hammer
Major H. Thustrup Hansen
Major consultant, MD, Hanne Sand Hansen
Mrs. Inger Hee
Secretary Niels-Jørgen Hilstrøm
Mrs. Alice Jørgensen
Department chief, veterinarian, Ib Knudsen
Nurse Vera Kristensen
Cashier Bent Lassen
Bank cashier Aase Lindestrøm
Marianne Mayntz
Former major Agnethe Nielsen
Head Nurse Kirsten Bork Nielsen
Former minister Aase Olesen
County Major Kresten Philipsen
Mrs. Kristine Rasmussen
Major consultant, MD, Carsten Rose
Mrs. Kirsten Blume Schmidt
Journalist Tove Smidth
Vice major Inger Stad
Christian Stentoft
Major Consultant, MD, E.B. Thorling
MD Ivar Østergaard
Mrs. Karna Østergaard

The Executive Committee

Professor, MD, Bent Harvald (*chairman*)
Lawyer Niels Fisch-Thomsen
Professor, MD, Mogens Blichert-Toft
Journalist Tove Smidth
Vice major Inger Stad

The Scientific Council

Professor, MD, Thorkild I. A. Sørensen (*NEW chairman*)
Associate professor, MD, Reidar Albrechtsen
Professor Julio E. Celis
Major consultant, MD, John Christiansen
Major Consultant, MD, Bo van Deurs
Major Consultant, MD, Peter Ebbesen
Major consultant, MD, Torsten Landberg
Major consultant, MD, Jens Pedersen-Bjergaard
Professor, MD, John Philip
Associate professor, MD, Hans Sjöström
Major Consultant, MD, Jens Vuust

1993 (from 31st December 1992):

Director: Ole Bang

Head Board:

Professor, MD, Bent Harvald (*Chairman*)
Lawyer Niels Fisch-Thomsen
Karen Baungard
Engineer John Bill
Professor, MD, Mogens Blichert-Toft
Professor, MD, Lars Bolund
CEO John Christensen
Professor, MD, Peter Elsass
Kirsten Fredsted
Mrs. Inger Hee
Secretary Niels-Jørgen Hilstrøm
Mrs. Alice Jørgensen
Department chief, veterinarian, Ib Knudsen
Nurse Vera Kristensen
Cashier Bent Lassen
Bank cashier Aase Lindestrøm
Marianne Mayntz
Former major Agnethe Nielsen
Head Nurse Kirsten Bork Nielsen
Former minister Aase Olesen
Major consultant, MD, Carsten Rose
Mrs. Kirsten Blume Schmidt
Journalist Tove Smidth
Vice major Inger Stad
Connie Steenberg
Christian Stentoft
Major Consultant, MD, E.B. Thorling
Major consultant, MD, Jørgen Ørnsholt
MD Ivar Østergaard

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Lawyer Niels Fisch-Thomsen
Professor, MD, Mogens Blichert-Toft
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Vice major Inger Stad

The Scientific Council

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Associate professor, MD, Reidar Albrechtsen
Major consultant, MD, John Christiansen
Major Consultant, MD, Bo van Deurs
Professor, MD, Heine Høi Hansen
Major Consultant, MD, Peter Ebbesen
Major consultant, MD, Torsten Landberg
Major consultant, MD, Jens Pedersen-Bjergaard
Major Consultant, MD, Jens Vuust

1994 (pr. 31st December 1993):

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Head Board:

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CEO John Christensen

Karen Baungaard

Assistant senior researcher Søren M. Bentzen

Engineer John Bill

Professor, MD, Lars Bolund

Professor, MD, Peter Elsass

Kirsten Fredsted

Lawyer Niels Fisch-Thomsen

Kirsten Fredsted

Svend Erik Haase

Kurt Hansen

Professor, MD, Bent Harvald

Mrs. Inger Hee

Secretary Niels-Jørgen Hilstrøm

Department chief, veterinarian, Ib Knudsen

Nurse Vera Kristensen

Cashier Bent Lassen

Bank cashier Aase Lindestrøm

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Former minister Aase Olesen

Major consultant, MD, Torben Palshof

Major consultant, MD, Carsten Rose

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Lona Skjørbæk

Vice major Inger Stad

Connie Steenberg

Christian Stentoft

Major Consultant, MD, E.B. Thorling

Major consultant, MD, Jørgen Ørnsholt

MD Ivar Østergaard

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Professor, MD, Jens Kr. Gøtrik (*new chairman*)

CEO John Christensen

Professor, MD, Lars Bolund

Former minister Aase Olesen

Vice major Inger Stad

The Scientific Council

Professor, MD, John Philip(*chairman*)

Professor Julio E. Celis

Associate professor, MD, Reidar Albrechtsen

Major consultant, MD, John Christiansen

Major Consultant, MD, Bo van Deurs

Professor Timo Hakulinen

Major consultant, MD, Peter Hokland

Major consultant, MD, Torsten Landberg

Professor, MD, Hans von der Maase

Major consultant, MD, Jens Pedersen-Bjergaard

Major Consultant, MD, Jens Vuust

Lecturer, MSc, Ole Westergaard

1995 (pr. 1st april 1995):

Director: Nina Würtzen

Head Board:

Professor, MD, Jens Kr. Gøtrik (*chairman*)
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Karen Baungaard
Assistant senior researcher Søren M. Bentzen
Engineer John Bill
Professor, MD, Lars Bolund
Hanne Brandt
Professor, MD, Peter Elsass
Kirsten Fredsted
Svend Erik Haase
CEO Kurt Hansen
Mrs. Inger Hee
Anny Borch Jensen
Lis Truels Jensen
Head Nurse Jytte Rønnow Jessen
Department chief, veterinarian, Ib Knudsen
Nurse Vera Kristensen
Cashier Bent Lassen
Marianne Mayntz
Major consultant, MD, Knud Aage Møller
Former major Agnethe Nielsen
Former minister Aase Olesen
Major consultant, MD, Torben Palshof
Major consultant, MD, Carsten Rose
Mrs. Kirsten Blume Schmidt
Lona Skjørbæk
Vice major Inger Stad
Connie Steenberg
Christian Stentoft
Major Consultant, MD, E.B. Thorling
Major consultant, MD, Jørgen Ørnsholt
MD Ivar Østergaard

The Executive Committee

Professor, MD, Jens Kr. Gøtrik (*chairman*)
CEO John Christensen
Professor, MD, Lars Bolund
Former minister Aase Olesen
Vice major Inger Stad

The Scientific Council

Professor, MD, John Philip(*chairman*)
Professor Julio E. Celis
Associate professor, MD, Reidar Albrechtsen
Major Consultant, MD, Bo van Deurs
Professor Timo Hakulinen
Major consultant, MD, Peter Hokland
Major consultant, MD, Sverre Heim
Major consultant, MD, Torsten Landberg
Research head, Elsebeth Lyngø
Professor, MD, Hans von der Maase
Major Consultant, MD, Jens Vuust
Lecturer, MSc, Ole Westergaard

1996:

Director: Nina Würtzen

Head Board:

Professor, MD, Jens Kr. Gøtrik (*chairman*)
CEO John Christensen
Karen Baungaard
Assistant senior researcher Søren M. Bentzen
Engineer John Bill
Professor, MD, Lars Bolund
Hanne Brandt
Professor, MD, Peter Elsass
Kirsten Fredsted
Svend Erik Haase
CEO Kurt Hansen
Marie Hansen
Anny Borch Jensen
Lis Truels Jensen
Head Nurse Jytte Rønnow Jessen
Nurse Vera Kristensen
Cashier Bent Lassen
Marianne Mayntz
Major consultant, MD, Knud Aage Møller
Former major Agnethe Nielsen
Former minister Aase Olesen
Major consultant, MD, Torben Palshof
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Mrs. Kirsten Blume Schmidt
Lona Skjørbæk
Connie Steenberg
Christian Stentoft
Major consultant, MD, Jørgen Ørnsholt
MD Ivar Østergaard

The Executive Committee

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Professor, MD, Lars Bolund
Kirsten Fredsted
CEO Kurt Hansen

The Scientific Council

Professor, MD, John Philip(*chairman*)
Professor Julio E. Celis
Professor, MD, Hans von der Maase
Professor Elisabeth Bock
Major Consultant, MD, Bo van Deurs
Professor Timo Hakulinen
Major consultant, MD, Peter Hokland
Professor, MD, Ole Kronborg
Major consultant, MD, Torsten Landberg
Research head, Elsebeth Lyngé
Major Consultant, MD, Jens Vuust
Lecturer, MSc, Ole Westergaard

1997/98:

Director: Nina Würtzen

Head Board:

Professor, MD, Jens Kr. Gøtrik (*chairman*)

CEO John Christensen

Ruth Bach

Karen Baungaard

Asger Baunsbak-Jensen

Major consultant, MD, Kamma Bertelsen

Professor, MD, Lars Bolund

Hanne Brandt

Grethe Dahlquist

Kirsten Fredsted

CEO Kurt Hansen

Marie Hansen

Bodil Lykke Holm

Senior Researcher Marja Jättelä

Anny Borch Jensen

Mette Jespersen

Head Nurse Jytte Rønnow Jessen

Nurse Vera Kristensen

Cashier Bent Lassen

Major consultant, MD, Knud Aage Møller

Finance Officer Jørgen Nørgaard

Major consultant, MD, Torben Palshof

Professor, MD, John Philip

Sonja Poulsen

Physician secretary Marie Lykke Rasmussen

MD Inger Sahlholdt

Connie Steenberg

IT-assistant Melissa Wieser

Major consultant, MD, Jørgen Ørnsholt

MD Ivar Østergaard

The Executive Committee

Professor, MD, Jens Kr. Gøtrik (*chairman*)

CEO John Christensen

Professor, MD, Lars Bolund

Banker Hanne Brandt

CEO Kurt Hansen

The Scientific Council

Professor, MD, Hans von der Maase (*new chairman*)

Research head, Elsebeth Lynge

MD, ph.d., Jiri Bartek

Professor Julio E. Celis

Professor Elisabeth Bock

Major consultant, MD, Per Dombernowsky

Professor Timo Hakulinen

Professor, MD, Sverre Heim

Major consultant, MD, Peter Hokland

Professor, MD, Hans Skovgaard Poulsen

Professor, MD, Jørgen Rygaard

Professor, MD, Ole Kronborg

Lecturer, MSc, Ole Westergaard

Major consultant, MD, Torben Ørntoft

2) The NSRC & MRC (1981-1998):

1981:

The NSRC:

Associate professor Dr. Hens Henrik Andersen, The Physics Department, Aarhus University.

Professor Brian F. C. Clark, The Chemistry Department, Aarhus University.

Professor Willi Dansgaard, Geophysical Isotope Laboratory, Copenhagen University.

Professor Tom Fenchel, Department for Genetics and Ecology, Aarhus University.

Professor Peter Johansen, Department for Datalogy, Copenhagen University.

Professor Leif Kristensen, Mathematics Department, Aarhus University.

MSc Niels Lund, Danish Space Research Institute.

Professor Valdemar Mikkelsen, KVL, Botanical Department.

Department head Hans Bjerrum Møller, Research Centre Risø.

Professor Kurt Nordström, Department for Molecular Biology, Odense University.

Professor Christian Pedersen, Department for Organic Chemistry, DTH.

Professor Eigil Præstgaard, Roskilde University Centre.

Professor Henning Sørensen (chairman), Department for Petrology, Virum.

Professor Erik W. Thulstrup.

The MRC:

Professor Paul Backer, Department for General Medicine, Copenhagen University.

Associate professor, Dr. Hans Bndgaard, The Danish Pharmaceutical School.

Professor and major consultant MD Viggo Faber, Epidemiology Department M, Rigshospitalet.

Professor MD J. Fabricius, Clinical physiological Department, Odense University.

Professor Ole Fejerskov, Aarhus Dentistry School.

Associate professor, Svend Juul, Department for social medicine, Aarhus University.

Professor MD Poul Kildeberg (chairman), Paediatric Department J, Odense University.

Professor Bodil Jerslev Lund.

Professor Frank Lundquist, Biochemical Department A, Copenhagen University.

Professor MD Jens F. Rehfeld, Clinical-chemical Department CL, Rigshospitalet.

Professor MD Mogens Schou, The Psychiatric Hospital, Aarhus.

Professor and major consultant Bent Sørensen, Department for Plastic Surgery, Hvidovre Hospital.

Chief Medical Officer Søren K. Sørensen, The National Health Board.

Chief psychologist alic Theilgaard, Psychiatric Department 0, Rigshospitalet.

Professor and major consultant Bengt Zachau-Christiansen.

1982:

The NSRC:

Associate professor Dr. Hens Henrik Andersen (chairman), The Physics Department, Aarhus University.

Professor Svend Olav Andersen, Department for Biological Chemistry A, Copenhagen University.

Professor Brian F. C. Clark, The Chemistry Department, Aarhus University.

Professor Willi Dansgaard, Geophysical Isotope Laboratory, Copenhagen University.

Associate professor Lauritz B. Holm-Nielsen, Botanical Department, Aarhus University.

Professor Peter Johansen, Department for Datalogy, Copenhagen University.

Professor Leif Kristensen, Mathematics Department, Aarhus University.

MSc Niels Lund, Danish Space Research Institute.

Professor Valdemar Mikkelsen, KVL, Botanical Department.

Vice Director Hans Bjerrum Møller, Research Centre Risø.

Professor Christian Pedersen, Department for Organic Chemistry, DTH.

Professor Eigil Præstgaard, Roskilde University Centre.

Professor Henning Sørensen, Department for Petrology, Virum.

Professor Erik W. Thulstrup, Chemical Department, DLH.

Professor Roy E. Weber, Biological Department, Odense University.

The MRC:

Professor Paul Backer, Department for General Medicine, Copenhagen University.

Professor MD Gunnar Bendixen, Medical Department A, Rigshospitalet.

Associate professor, Dr. Hans Bundgaard, The Danish Pharmaceutical School.

Professor MD J. Fabricius, Clinical-physiological Department, Odense University.

Professor Ole Fejerskov, Aarhus Dentistry School.

Associate professor, Svend Juul, Department for social medicine, Aarhus University.

Professor MD Poul Kildeberg (chairman), Paediatric Department J, Odense University.

Professor Bodil Jerslev Lund.

Professor Frank Lundquist, Biochemical Department A, Copenhagen University.

Professor MD Jens F. Rehfeld, Clinical-chemical Department CL, Rigshospitalet.

Professor MD Mogens Schou, The Psychiatric Hospital, Aarhus.

Professor MD Morten Simonsen, Department for Experimental Immunology, Copenhagen University.

Professor and major consultant Bent Sørensen, Department for Plastic Surgery, Hvidovre Hospital.

Chief psychologist Alice Theilgaard, Psychiatric Department 0, Rigshospitalet.

Professor and major consultant Bengt Zachau-Christiansen.

1983:

The NSRC:

Associate professor Dr. Hens Henrik Andersen (chairman), The Physics Laboratory II, Copenhagen University.

Professor Svend Olav Andersen, Department for Biological Chemistry A, Copenhagen University.

Professor Brian F. C. Clark, The Chemistry Department, Aarhus University.

Professor Willi Dansgaard, Geophysical Isotope Laboratory, Copenhagen University.

Associate professor Lauritz B. Holm-Nielsen, Botanical Department, Aarhus University.

Professor Niels Haarløv, Department for Zoology, KVL.

Professor Peter Johansen, Department for Datalogy, Copenhagen University.

Professor Leif Kristensen, Mathematics Department, Aarhus University.

MSc Niels Lund, Danish Space Research Institute.

Vice Director Hans Bjerrum Møller, Research Centre Risø.

Professor Christian Pedersen, Department for Organic Chemistry, DTH.

Professor Eigil Præstgaard, Roskilde University Centre.

Professor Henning Sørensen, Department for Petrology, Virum.

Professor Erik W. Thulstrup, Chemical Department, DLH.

Professor Roy E. Weber, Biological Department, Odense University.

The MRC:

Professor Paul Backer, Department for General Medicine, Copenhagen University.

Professor MD Gunnar Bendixen, Medical Department A, Rigshospitalet.

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Major consultant, professor, MD, Marianne Schroll,
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Surgical Department C, Rigshospitalet.

1997/98:

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Research head, professor, Børge Diderichsen, Novo Nordisk A/S.

Associate professor Peter H. Hansen, The Niels Bohr Institute.

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Associate professor, John A. Korstgård, Geological Department, Aarhus University.

Professor Erik Larsen, Department for Chemistry, The Royal Veterinarian School. (chairman).

Professor Kim Guldstrand Larsen, Department for Electronic Systems, Aalborg University. (member until 31.7.1997).

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Associate professor Bente Aagaard Lomstein, Biological Department, Aarhus University.

Research specialist Ole John Nielsen, Research Centre Risø, (member since 1.8.1998).

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Professor, MD, Jørgen Ellegaard, Aarhus County Hospital,

Professor Jan Fahrenkrug, Clinical-Biochemical Department, Bispebjerg Hospital, (member since 1.8.1998).

Major Consultant, MD, Annette Gjerris, Psychiatric Department A, KAS Gentofte.

Professor, MD, Philippe Grandjean, Odense University. (member until 31.7.1998).

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Professor, MD, Flemming Stadil, Surgical Department C, Rigshospitalet. (member until 31.7.1997).

Professor Arne Svejgaard, Clinical-Immunological Department, Rigshospitalet. (member since 1.8.1997).

Major consultant, MD, Ann Tabor, Hvidovre Hospital. (member since 1.8.1998).

Appendix D: Central institutions

The Danish Cancer Registry: Founded by Johannes Clemmesen and the Danish Cancer Society in 1942. It is an institution with the purpose of producing cancer statistics and epidemiological research based on the reported cancer incidences and cancer related deaths in the country.

The Danish Cancer Society: A private cancer charity founded in 1928. Its main activities are cancer research, cancer education, and counselling of cancer patients and their families. The charity finances more than 50 % of all cancer research in the country. Its head offices are located in Copenhagen, but it has smaller regional departments all over the country.

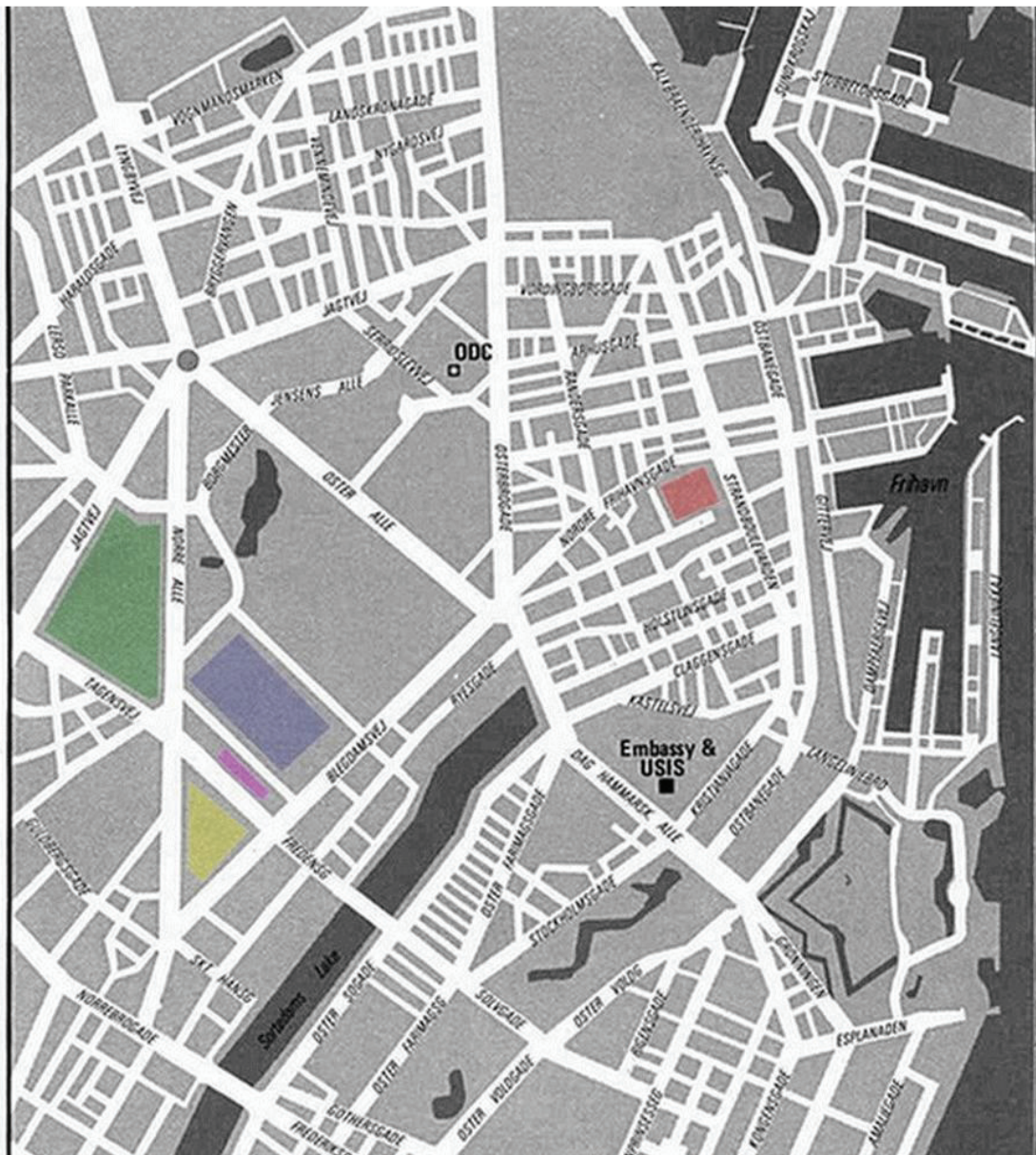
The Copenhagen University: Founded in 1479. It accommodates more than 30 000 students and 7000 scientific and technical/administrative personnel. With over 100 different types of educations, it is the largest educational institute in the country.

The Fibiger Laboratory/Institute: The Fibiger Laboratory was founded in 1949 by the Danish Cancer Society and the Copenhagen University and it was located at the university. In 1965, it was made an independent institute and it was later moved to the Finsen area. It is a cancer research institution and it is owned and operated by the private cancer society.

The Finsen Institute and the Finsen Laboratory: Originally a self-owning institution founded in 1896 with the purpose of continuing the Nobel laureate Niels Finsen's radiation treatment of skin diseases (incl. cancers). In cooperation with the Danish Cancer Society, the institute was converted into a small hospital specialising in cancer treatment. In 1981, the institute was officially fused with the Rigshospitalet, to which the small private hospital's patients and oncology wards were finally moved in 1990. The Finsen Laboratory, a lab for experimental cancer research, was left behind at the Finsen premises, and the remaining buildings were eventually occupied by the Danish Cancer Society and its research units (the Society had already bought one of the buildings for its Fibiger Institute that neighboured the Finsen Lab).

The Rigshospitalet: The State-owned hospital was founded in 1910 and located at Blegdamsvej in Copenhagen. The hospital was restructured and expanded from the 1960's onwards until it became the largest teaching hospital in the country with room for more than 1250 patients.

Appendix E: Map of Østerbro (Copenhagen)



The Finsen area/The Fibiger Institute/ The Finsen Laboratory



The Rigshospitalet



The University Park area



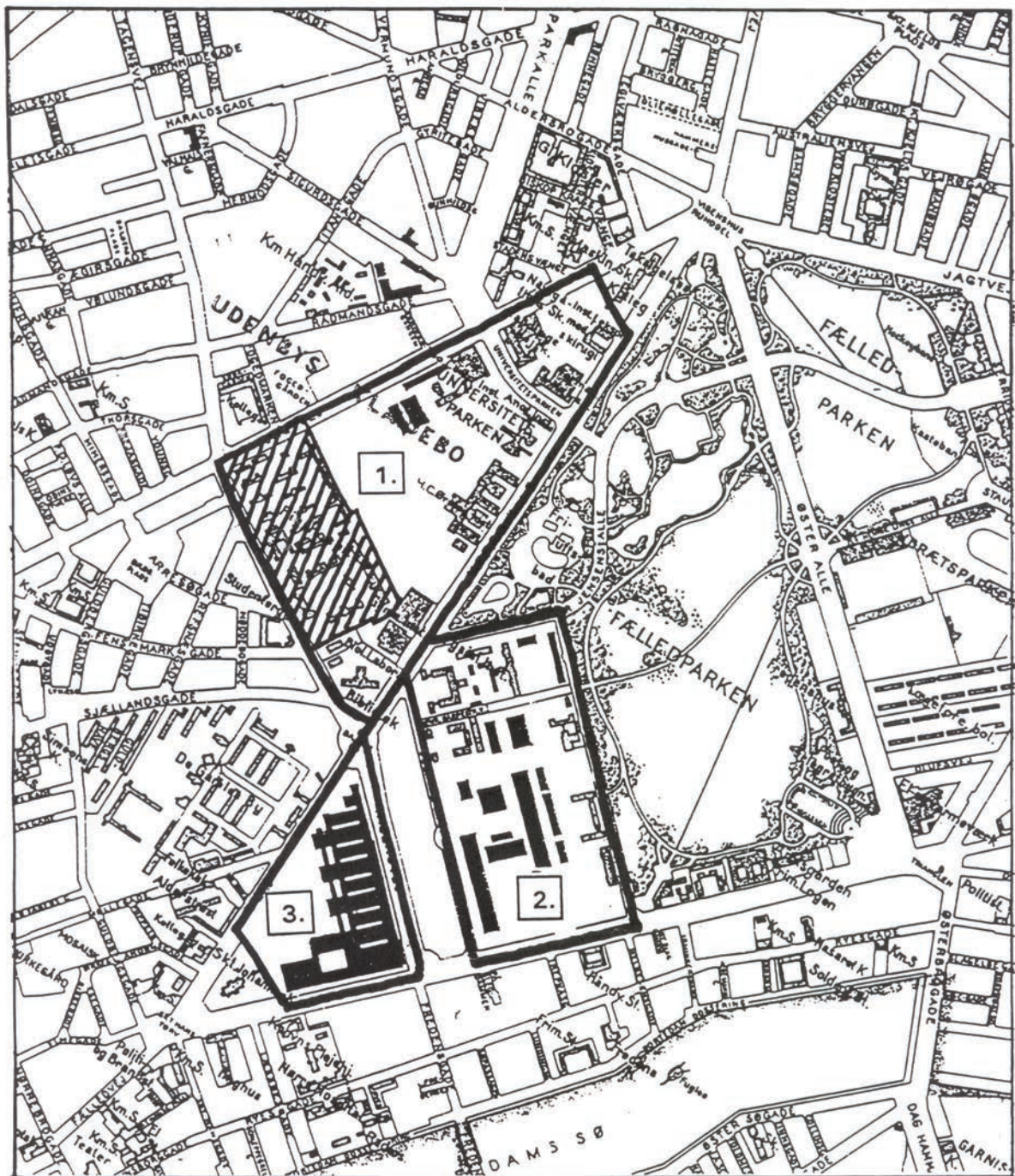
The Panum Institute/ The Medical Faculty



The Planned location of the Rockefeller cancer centre

The distance between the Panum Institute and the Finsen area = 1.9 km

Appendix F: Location of BRIC



1. THE UNIVERSITY PARK AREA
 2. THE RIGSHOSPITALET AREA
 3. THE PANUM AREA/ THE MEDICAL FACULTY
- ≡ THE BRIC (TAGENSVEJ 18)

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